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GENERAL INFORMATION

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1999 Publication Numbers

Model	Model No.	Owner's Manual Supplement	Parts Manual	Parts Microfiche
Indy 340	099LB3AS	9914669	9914673	9914674
Indy 340 Deluxe	099LD3AS	9914669	9914673	9914674
Indy Sport	099SB4DS	9914853	9914827	9914799
Indy XCF	099SP4AS	9914853	9914828	9914801
Indy Super Sport	099SB5BS	9914853	9914835	9914808
Indy Trail Blue	099EB4ES	9914682	9914834	9914807
Indy Trail Green	099EB4ESA	9914682	9914834	9914807
Indy 500 Black	099EB4BS	9914682	9914683	9914684
Indy 500 White	099EB4BSA	9914682	9914683	9914684
Indy 500 Classic	099ED4BS	9914682	9914830	9914803
Indy XLT Classic	099ED6AS	9914856	9914840	9914813
Indy XLT Special	099AB6AS	9914857	9914839	9914812
Indy 340 Touring	099LT3AS	9914669	9914670	9914671
Indy Sport Touring	099ST4DS	9914853	9915044	9915045
Indy Trail Touring Blue	099ET4ES	9914682	9914833	9914806
Indy Trail Touring Green	099ET4ESA	9914682	9914833	9914806
Indy Classic Touring	099ET4BS	9914854	9914831	9914804
Indy XLT Touring Blue	099ET6AS	9914856	9914838	9914811
Indy XLT Touring Gold	099ET6ASA	9914856	9914838	9914811
Indy 440 XCR	099SX4CS	9914860	9914844	9914817
Indy 500 XC	099SB5AS	9914861	9915015	9915016
Indy 500 XC SP	099SP5AS	9914861	9914845	9914818
Indy 600 XC	099SB6DS	9914861	9914846	9914819
Indy 600 XC SP	099SP6DS	9914861	9914847	9914820
Indy 700 XC	099SB7AS	9914861	9914849	9914822
Indy 700 XC SP	099SP7AS	9914861	9914850	9914823
Indy 700 XCR	099AB7BS	9914858	9914842	9914815
Indy 800 XCR	099AB8AS	9914859	9914843	9914816
Indy Trail RMK	099SR5BS	9914853	9914836	9914809
Indy 500 RMK	099ER4BS	9914682	9914829	9914802
Indy 600 RMK 1.75"Track	099SR6DS	9914861	9914848	9914821
Indy 600 RMK 2"Track	099SR6DSA	9914861	9914848	9914821
Indy 700 RMK 1.75"Track	099SR7AS	9914861	9914852	9914825
Indy 700 RMK 2"Track	099SR7ASA	9914861	9914852	9914825
Indy 700 SKS	099SS7AS	9914861	9914851	9914824
Indy Tran Sport	099SU4DS	9914853	9914826	9914798
Indy WideTrak LX	099SU4BS	9914855	9914832	9914805

1999 Snowmobile Owner's Manual (All) - PN 9914668
Snowmobile Assembly Manual - PN 9913911

1999 Polaris Snowmobile Paint Codes

Model	Hood Color Description	Polaris "P" No.	Spring Color Description	Polaris "P" No.
Indy 340	Bright White	P133	Medium Blue	P107
Indy 340 Deluxe	Rigel Blue	P246	Medium Blue	P107
Indy 340 Touring	Candy Red	P259	Candy Red	P259
Indy Sport	Candy Red	P259	Candy Red	P259
Indy Sport Touring	Candy Red	P259	Candy Red	P259
Indy TranSport	Emerald	P210	Gold	P227
Indy XCF	Bright Red	P243	Bright Red	P243
Indy Super Sport	Bright White	P133	Violet C	P198
Indy 440 XCR	Bright Red	P243	Violet C	P198
Indy 500 Classic	Candy Red	P259	Candy Red	P259
Indy Classic Touring	Candy Red	P259	Candy Red	P259
Indy 500 Opt. 1	Black Metallic	P177	Medium Blue	P107
Indy 500 Opt. 2	Bright White	P133	Medium Blue	P107
Indy 500 RMK	Black Metallic	P177	Medium Blue	P107
Indy 500 XC, SP	Black Metallic	P177	Racing Red	P239
Indy 600 XC, SP	Bright Red	P243	Bright Red	P243
Indy 600 RMK	Deep Violet	P230	Violet C	P198
Indy 700 XC	Bright White	P133	Racing Red	P239
Indy 700 XC SP	Black Metallic	P177	Racing Red	P239
Indy 700 RMK	Rigel Blue	P246	Medium Blue	P107
Indy 700 SKS	Rigel Blue	P246	Medium Blue	P107
Indy Trail Opt. 1	Rigel Blue	P246	Medium Blue	P107
Indy Trail Opt. 2	Mystic Green	P269	Light Teal	P169
Indy Trail Touring Opt.1	Rigel Blue	P246	Medium Blue	P107
Indy Trail Touring Opt. 2	Mystic Green	P269	Light Teal	P169
Indy Trail RMK	Rigel Blue	P246	Medium Blue	P107
Indy XLT SP	Black Metallic	P177	Bright Red	P243
Indy XLT Touring Opt. 1	Rigel Blue	P246	Medium Blue	P107
Indy XLT Touring Opt. 2	Gold Mist Metallic	P274	Gold	P227
Indy XLT Classic	Candy Red	P259	Candy Red	P259
Indy 700 XCR	Deep Violet	P230	Bright Red	P243
Indy 800 XCR	Bright Red	P243	Bright Red	P243
Indy WideTrak LX	Emerald	P210	Gold	P227

Order Polaris "P" Number from Midwest Industrial Coatings (612-934-8252). Mix as directed.

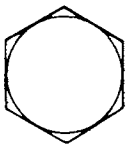
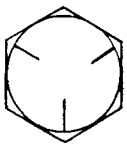
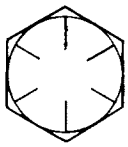
1998 Model	Bulletin #	Type	Notes
Storm			
700 XC	S-98-03	Service	Exhaust Heat Shield Kit/Float Level Information
700 XCR	S-97-05R	***Safety Alert***	Pitman Arm Weld Failure And Pitman Arm to Steering Rack Bolt Replacement
	S-97-05	***Safety Alert - Refer To S-97-05R***	
700 RMK	S-97-05R	***Safety Alert***	Pitman Arm Weld Failure And Pitman Arm to Steering Rack Bolt Replacement
	S-97-05	***Safety Alert - Refer To S-97-05R***	
	S-97-08	Service	Nosepan Heat Damage
	S-98-04	Service	Exhaust Heat Shield Kit
Ultra			
Ultra Touring	S-98-05	Service	Passenger Hand Grip Heaters
600 XC	S-98-01	Service	Exhaust Heat Shield Kit/Running Quality Upgrades
600 XCR	S-97-05R	***Safety Alert***	Pitman Arm Weld Failure And Pitman Arm to Steering Rack Bolt Replacement
	S-97-05	***Safety Alert - Refer To S-97-05R***	
600 RMK	S-97-05R	***Safety Alert***	Pitman Arm Weld Failure And Pitman Arm to Steering Rack Bolt Replacement
	S-97-05	***Safety Alert - Refer To S-97-05R***	
	S-97-08	Service	Nosepan Heat Damage
	S-98-02	Service	Exhaust Heat Shield Kit/Jet Needle E-clip Position
XLT SP	S-97-05R	***Safety Alert***	Pitman Arm Weld Failure And Pitman Arm to Steering Rack Bolt Replacement
	S-97-05	***Safety Alert - Refer To S-97-05R***	
XLT Ltd			
XLT Classic			
XLT Touring	S-98-05	Service	Passenger Hand Grip Heaters
500			
500 RMK			
Classic			
Classic Touring	S-98-05	Service	Passenger Hand Grip Heaters
Widetrak LX			
Trail			
Trail Touring			
Trail RMK			
440			
440 XCR			
XCF			
Sport			
Super Sport			
Sport Touring			
Transport			
Lite, Lite Dlx, Lite Trg.			

Bulletin Index - 1999 By Model

1999 Model	Bulletin #	Type	Notes
800 XCR			
700 XCR			
700 XC	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
700 XC SP	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
700 RMK	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
700 SKS	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
600 XC	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
600 XC SP	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
600 RMK	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
XLT SP			
XLT Classic			
XLT Touring			
500			
500 RMK			
500 XC			
500 XC SP	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
Classic			
Classic Touring			
Widetrak LX	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
Trail			
Trail Touring			
Trail RMK	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
440 XCR			
XCF	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
Sport	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
Super Sport	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
Sport Touring	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
Transport	S-98-06	Service	Updates for 1999 Gen II Pilot Builds
340			
340 Deluxe			
340 Touring			

Standard Torque Specifications

The following torque specifications are to be used as a general guideline when torque value is not specified. There are exceptions in the steering, suspension, and engine areas. Always consult the torque chart and the specific manual section for torque values of fasteners.

Bolt Size	Threads/In (MM/Thread)	Grade 2	Grade 5	Grade 8
		Torque in. lbs. (kg/m)		
#10 -	24	27 (.31)	43 (.50)	60 (.69)
#10 -	32	31 (.36)	49 (.56)	68 (.78)
		Torque ft. lbs. (kg/m)*		
1/4 -	20	5 (.7)	8 (1.1)	12 (1.6)
1/4 -	28	6 (.8)	10 (1.4)	14 (1.9)
5/16 -	18	11 (1.5)	17 (2.3)	25 (3.5)
5/16 -	24	12 (1.6)	19 (2.6)	29 (4.0)
3/8 -	16	20 (2.7)	30 (4.0)	45 (6.2)
3/8 -	24	23 (3.2)	35 (4.8)	50 (6.9)
7/16 -	14	30 (4.0)	50 (6.9)	70 (9.7)
7/16 -	20	35 (4.8)	55 (7.6)	80 (11.0)
1/2 -	13	50 (6.9)	75 (10.4)	110 (15.2)
1/2 -	20	55 (7.6)	90 (12.4)	120 (16.6)

*To convert ft. lbs. to kg/m multiply foot pounds by .138.

*To convert kg/m to N/m move the decimal to the right one position.

Recommended Shop Supplies / Accessories

Description	Part Number
Synthetic Chaincase Lubricant - One Gallon	2871477
Synthetic Chaincase Lubricant - (12 oz)	2871478
Cable Lubricant	2870510
Fuel System Deicer (Isopropyl)	2870505
Loctite Primer T - 6 Oz. Aerosol	2870585
Loctite RC 680 - 10cc Retaining Compound	2870584
Loctite 515 Gasket Eliminator - 50cc Tube	2870587
Loctite/Chisel – Gasket Remover - 18 Oz.	2870601
Metal Polish - 8 Oz.	2870632
DOT 3 Brake Fluid	2870990
Fogging Oil	2870791
Corrosion Resistant Dielectric Grease	2871027
Fox Shock Oil	2870995
Premium All Season Grease (14 1/2 oz)	2871423
Premium All Season Grease (3 oz)	2871322
Premium 60/40 Anti-Freeze/Coolant	2871323
Premium Carbon Clean Fuel System Additive	2871326
Polaris Battery Tender	2871076
Carbon Clean Fuel System Additive	2871326
T-9 Metal Protectant	2871064
Crankcase Sealant 3 Bond 1215	2871557

1/64	.0156	
1/32	.0312	1 mm = .0394″
3/64	.0469	
1/16	.0625	
5/64	.0781	2 mm = .0787″
3/32	.0938	
7/64	.1094	3 mm = .1181″
1/8	1250	
9/64	.1406	
5/32	.1563	4 mm = .1575″
11/64	.1719	
3/16	.1875	5 mm = .1969″
13/64	.2031	
7/32	.2188	
15/64	.2344	6 mm = .2362″
1/4	.25	
17/64	.2656	7 mm = .2756″
9/32	.2813	
19/64	.2969	
5/16	.3125	8 mm = .3150″
21/64	.3281	
11/32	.3438	9 mm = .3543″
23/64	.3594	
3/8	.375	
25/64	.3906	10 mm = .3937″
13/32	.4063	
27/64	.4219	11 mm = .4331″
7/16	.4375	
29/64	.4531	
15/32	.4688	12 mm = .4724″
31/64	.4844	
1/2	.5	13 mm = .5118
33/64	.5156	
17/32	.5313	
35/64	.5469	14 mm = .5512″
9/16	.5625	
37/64	.5781	15 mm = .5906″
19/32	.5938	
39/64	.6094	
5/8	.625	16 mm = .6299″
41/64	.6406	
21/32	.6563	17 mm = .6693″
43/64	.6719	
11/16	.6875	
45/64	.7031	18 mm = .7087″
23/32	.7188	
47/64	.7344	19 mm = .7480″
3/4	.75	
49/64	.7656	
25/32	.7813	20 mm = .7874″
51/64	.7969	
13/16	.8125	21 mm = .8268″
53/64	.8281	
27/32	.8438	
55/64	.8594	22 mm = .8661″
7/8	.875	
57/64	.8906	23 mm = .9055″
29/32	.9063	
59/64	.9219	
15/16	.9375	24 mm = .9449″
61/64	.9531	
31/32	.9688	25 mm = .9843
63/64	.9844	
1	1.0	

SAE Tap Drill Sizes

Thread Size	Drill Size	Thread Size	Drill Size
#0-80	3/64	1/2-13	27/64
#1-64	53	1/2-20	29/64
#1-72	53	9/16-12	31/64
#2-56	51	9/16-18	33/64
#2-64	50	5/8-11	17/32
#3-48	5/64	5/8-18	37/64
#3-56	45	3/4-10	21/32
#4-40	43	3/4-16	11/16
#4-48	42	7/8-9	49/64
#5-40	38	7/8-14	13/16
#5-44	37	1-8	7/8
#6-32	36	1-12	59/64
#6-40	33	1 1/8-7	63/64
#8-32	29	1 1/8-12	1 3/64
#8-36	29	1 1/4-7	1 7/64
#10-24	24	1 1/4-12	1 11/64
#10-32	21	1 1/2-6	1 11/32
#12-24	17	1 1/2-12	1 27/64
#12-28	4.6mm	1 3/4-5	1 9/16
1/4-20	7	1 3/4-12	1 43/64
1/4-28	3	2-4 1/2	1 25/32
5/16-18	F	2-12	1 59/64
5/16-24	I	2 1/4-4 1/2	2 1/32
3/8-16	O	2 1/2-4	2 1/4
3/8-24	Q	2 3/4-4	2 1/2
7/16-14	U	3-4	2 3/4
7/16-20	25/64		

Metric Tap Drill Sizes

Tap Size	Drill Size	Decimal Equivalent	Nearest Fraction
3 x .50	#39	0.0995	3/32
3 x .60	3/32	0.0937	3/32
4 x .70	#30	0.1285	1/8
4 x .75	1/8	0.125	1/8
5 x .80	#19	0.166	11/64
5 x .90	#20	0.161	5/32
6 x 1.00	#9	0.196	13/64
7 x 1.00	16/64	0.234	15/64
8 x 1.00	J	0.277	9/32
8 x 1.25	17/64	0.265	17/64
9 x 1.00	5/16	0.3125	5/16
9 x 1.25	5/16	0.3125	5/16
10 x 1.25	11/32	0.3437	11/32
10 x 1.50	R	0.339	11/32
11 x 1.50	3/8	0.375	3/8
12 x 1.50	13/32	0.406	13/32
12 x 1.75	13/32	0.406	13/32

Unit of Measure	Multiplied by	Converts to
ft. lbs.	x 12	= in. lbs.
in. lbs.	x .0833	= ft. lbs.
ft. lbs.	x .1383	= kg-m
in. lbs.	x .0115	= kg-m
kg-m	x 7.233	= ft. lbs.
kg-m	x 86.796	= in. lbs.
kg-m	x 10	= Nm
in.	x 25.4	=mm
mm	x .03937	= in.
in.	x 2.54	= cm
mile (mi.)	x 1.6	= km
km	x .6214	= mile (mi.)
Ounces (oz)	x 28.35	= Grams (g)
Grams (g)	x 0.035	= Ounces (oz)
cc	x .03381	= Fluid Ounces (oz)
lb.	x .454	= kg
kg	x 2.2046	= lb.
Cubic inches (cu in)	x 16.387	= Cubic centimeters (cc)
Cubic centimeters (cc)	x 0.061	= Cubic inches (cu in)
Imperial pints (Imp pt)	x 0.568	= Liters (l)
Liters (l)	x 1.76	= Imperial pints (Imp pt)
Imperial quarts (Imp qt)	x 1.137	= Liters (l)
Liters (l)	x 0.88	= Imperial quarts (Imp qt)
Imperial quarts (Imp qt)	x 1.201	= US quarts (US qt)
US quarts (US qt)	x 0.833	= Imperial quarts (Imp qt)
US quarts (US qt)	x 0.946	= Liters (l)
Liters (l)	x 1.057	= US quarts (US qt)
US gallons (US gal)	x 3.785	=Liters (l)
Liters (l)	x 0.264	= US gallons (US gal)
Pounds - force per square inch (psi)	x 6.895	= Kilopascals (kPa)
Kilopascals (kPa)	x 0.145	= Pounds - force per square inch (psi)
Kilopascals (kPa)	x 0.01	= Kilograms - force per square cm
Kilograms - force per square cm	x 98.1	= Kilopascals (kPa)

°C to °F: 9 (°C + 40) ÷ 5 – 40 = °F
°F to °C: 5 (°F + 40) ÷ 9 – 40 = °C

POLARIS
INDUSTRIES INC.

VST Service Tools

FOREWORD

This catalog has been produced to assist Polaris dealers and distributors in ordering Polaris Service tools from *Victor Specialty Tool Company* (VST). To keep the information contained in this catalog current and accurate, Tool Catalog Update pages will be mailed annually. Information on new service tools will be included in the General section of the monthly *Service Team Tips* dealer newsletter.

Tools listed in this catalog as "commercially available" cannot be ordered through VST. The suggested tool or an equivalent can be purchased through most automotive tool suppliers or tool manufacturers.

Note to new Dealers or Distributors: Suggested new Dealer / Distributor tool kit contents for each product line (or combination thereof) are listed separately in the Index/Addendum section of this catalog. Contact VST for a current tool price list. Inquiries regarding tool availability, suggestions or usage should be directed to VST at the phone number listed below.

Information, photographs, and illustrations contained in this manual are general representations and actual tools may differ. All information subject to change without notice.

TO PLACE AN ORDER

(Canadian Dealers order directly from Polaris Winnipeg)

TOLL FREE ORDER FAX

(ORDERS ONLY)

1-800-716-3938

PHONE ORDERS OR INFORMATION

1-716-742-1790

Service Tool Catalog Part Number 9914681

ACS: Alternator control switch.

ACV: Alternating current voltage.

Air Gap Spark Test: A good check for ignition voltage and general ignition system condition. Spark should arc 3/8" (1 cm) minimum from end of high tension lead to ground. Several testers are available commercially.

Alternator: Electrical generator producing alternating current voltage.

Bore: Diameter of cylinder.

BTDC: Before Top Dead Center.

Bump Steer: When skis toe in and toe out through suspension travel.

CDI: Capacitor Discharge Ignition. Ignition system which stores voltage generated by the stator plate exciter coil in a capacitor or condenser (in CDI box). At the proper moment a voltage generated by the stator plate pulser coil closes an electronic switch (thyristor) in the CDI box and allows the voltage in the capacitor to discharge into the primary windings of the ignition coil.

Center Cylinder: On three cylinder engines, the cylinder between Mag and PTO ends.

Center Distance: Distance between center of crankshaft and center of driven clutch shaft.

Chain Pitch: Distance between chain link pins (No. 35 = 3/8" or 1 cm). Polaris measures chain length in number of pitches.

Clutch Buttons: Plastic bushings which transmit rotation of the clutch to the movable sheave in the drive and driven clutch.

Clutch Offset: Drive and driven clutches are offset so that drive belt will stay nearly straight as it moves along the clutch face as the engine torques back.

Clutch Weights: Three levers in the drive clutch which relative to their weight, profile and engine RPM cause the drive clutch to close.

Coil: A winding of wire around an iron core which has the ability to generate an electrical current when a magnetic field passes through it.

Combustion Chamber: Space between cylinder head and piston dome at TDC.

Compression: Reduction in volume or squeezing of a gas.

Condenser/Capacitor: A storage reservoir for electricity, used in both E.T. and CDI systems.

Crankshaft Run-Out: Run-out or "bend" of crankshaft measured with a dial indicator while crankshaft is supported between centers on V blocks or resting in lower half of crankcase. Measure at various points especially at PTO. Maximum allowable run-out is .006" (.02 cm).

DCV: Direct current voltage.

Detonation: The spontaneous ignition of the unburned fuel/air mixture after normal spark ignition. Piston looks "hammered" through, rough appearance around hole. Possible causes: 1) lean fuel/air mixture; 2) low octane fuel; 3) over-advanced ignition timing; 4)compression ratio too high for the fuel octane.

Dial Bore Gauge: A cylinder measuring instrument which uses a dial indicator. Good for showing taper and out-of-round in the cylinder bore.

Displacement: The volume of the cylinder displaced by the piston as it travels from BDC to TDC. The formula is:

$$\frac{\text{Bore}^2 \times \text{Stroke} \times 3.1416}{4} = \text{Displacement in CCs}$$

Effective Compression Ratio: Compression ratio measured from after the piston closes the exhaust port.

Electrical Open: Open circuit. An electrical circuit which isn't complete. (i.e. poor connections or broken wire at hi-lo beam switch resulting in loss of headlights.

Electrical Short: Short circuit. An electrical circuit which is completed before the current reaches the intended component. (i.e. a bare wire touching the snowmobile chassis under the seat resulting in loss of taillights and brake lights).

End Seals: Rubber seals at each end of the crankshaft.

Engagement RPM: Engine RPM at which the drive clutch engages to make contact with the drive belt.

Flat Head Bolt: To be used where finished surfaces require a flush fastening unit. Countersunk.

Foot Pound: Ft. lb. A force of one pound at the end of a lever one foot in length, applied in a rotational direction.

g: Gram. Unit of weight in the metric system.

Head Volume: Cylinder head capacity in cc, head removed from engine with spark plug installed.

Heat Exchanger: A device used to transfer heat. Mounted under running boards, they dissipate engine heat to the atmosphere.

Hex Head Bolt: Standard type of wrench-applied hexagon head, characterized by clean, sharp corners trimmed to close tolerances. Recommended for general commercial applications.

Hi-Fax: Trademark of Himont Advanced Materials. The special slide material which fits onto the bottom of the suspension rails.

High Side: Sled pushes or tips up.

High Tension Wire: The heavy insulated wire which carries the high secondary voltage from the coil to the spark plug.

Hole Shot: A term used when machine starts a race from a dead stop.

Holed Piston: Piston in which a hole has formed on the dome. Possible causes: 1) detonation; 2) pre-ignition.

Ignition Coil: A type of transformer which increases voltage in the primary windings (approx. 200V) to a higher voltage in the secondary windings (approx. 14KV - 32KV) through inductions. Secondary voltage is high enough to arc the air gap at the spark plug.

Ignition Generating Coil: Exciter coil or primary charge coil. Stator plate coil which generates primary ignition voltage. CDI system uses one ignition generating coil.

Inch Pound: In. lb. 12 in. lbs. = 1 ft. lb.

Kg/cm2: Kilograms per square centimeter. Metric equivalent of PSI.

Keystone Ring: A piston ring with bevel on upper surface.

Kilogram/meter: A force of one kilogram at the end of a lever one meter in length, applied in a rotational direction. Metric equivalent of ft. lbs.

L Ring: A wide face piston ring with an "L" shaped cross section. Leg of "L" goes up when installing on piston.

Labyrinth Seal: A pressure type center seal identified by series of grooves and lands. Polaris engines us this type of seal to separate the cylinders in the crankcase halves.

Left Side: Always referred to based on normal operating position of the driver.

Lighting Coil: Generates voltage for lights, battery charging, etc by electromagnetic induction.

Loose: When the rear of the vehicle slides outward in a turn. The track does not grab sufficiently.

mm: Millimeter. Unit of length in the metric system. 1mm = .040".

Mag End: Flywheel side of engine.

Magnetic Induction: As a conductor (coil) is moved through a magnetic field, a voltage will be generated in the windings. This is how mechanical energy in our engines is converted to electrical energy in the lighting coil, ignition generating coils and trigger coil.

Ohm: The unit of electrical resistance opposing current flow.

Oval Head Screw: Fully specified as "oval countersunk", this head is identical to the standard flat head, but possesses a rounded upper surface for attractiveness of design.

PTO End: Power Take Off drive (clutch side).

Pan Head Screw: Provides a low, large diameter head, but with characteristically high outer edges along the outer edge of the head where driving action is most effective. Slightly different head contour when supplied with Phillips Recess. See dotted line.

Piston Clearance: Total distance between piston and cylinder wall.

Piston Erosion: Piston dome melts. Usually occurs at the exhaust port area. Possible causes: 1) lean fuel/air mixture; 2) improper spark plug heat range.

Pre-Ignition: A problem in combustion where the fuel/air mixture is ignited before normal spark ignition. Piston looks melted at area of damage. Possible causes: 1)incorrect spark plug heat range; 2) spark plug not properly torqued; 3) "glowing" piece of head gasket, metal burr or carbon in the combustion chamber; 4) lean fuel/air mixture; 5) Incorrect ignition timing.

Primary Circuit: This circuit is responsible for the voltage build up in the primary windings of the coil. Parts of this circuit include the exciter coil, points and condenser, wires from the stator plate to the small primary winding in the ignition coil. In the CDI system the parts include the exciter coil, the trigger coil, the wires from stator plate to CDI box and to the low resistance primary windings in the ignition coil.

Primary Clutch: Drive clutch on engine.

Primary Compression: Pressure built up in the crankcase of a two stroke engine.

psi.: Pounds per square inch.

Pushing: When the front of the vehicle does not steer as much as the driver desires. The skis do not grab sufficiently.

R & R: Remove and replace.

RFI: Radio Frequency Interference. Caused by high voltage from the ignition system. There are special plug caps and spark plugs to help eliminate this problem. Required in Canada.

RPM: Revolutions Per Minute.

Resistance: In the mechanical sense, friction or load. In the electrical sense, ohms. Both result in energy conversion to heat.

Right Side: Always referred to based on normal operating position of the driver.

Round Head Screw: The familiar head most universally used for general application. Good slot depth, ample underhead bearing surface and finished appearance are characteristic of this head.

Running Time: Ignition timing when fully advanced or at specified RPM.

Secondary Circuit: This circuit consists of the large secondary coil windings, high tension wire and ground through the spark plug air gap.

Secondary Clutch: Driven clutch on chaincase or jackshaft.

Seized Piston: Galling of the sides of a piston. Usually there is a transfer of aluminum from the piston onto the cylinder wall. Possible causes: 1) improper lubrication; 2) excessive temperatures; 3) insufficient piston clearance; 4) stuck piston rings.

Self Steer: Pulling the machine to the inside of the track.

Spark Plug Reach: Length of threaded portion of spark plug. Polaris uses 3/4" (2 cm) reach plugs.

Static Timing: Ignition timing when engine is at zero RPM.

Stator Plate: The plate mounted under the flywheel supporting the primary ignition components and lighting coils.

Stroke: The maximum movement of the piston from bottom dead center to top dead center. It is characterized by 180° of crankshaft rotation.

Surge Tank: The fill tank in the liquid cooling system.

TDC: Top Dead Center. Piston's most outward travel from crankshaft.

Transfer: The movement of fuel/air from the crankcase to the combustion chamber in a two stroke engine.

Trigger Coil: Pulser coil. Generates the voltage for triggering (closing) the thyristor and timing the spark in CDI systems. Small coil mounted at the top of the stator plate next to the ignition generating coil.

V Regulator: Voltage regulator. Maintains maximum lighting coil output at approx. 14.5 ACV as engine RPM increases.

Venturi: An area of air constriction. A venturi is used in carburetors to speed up air flow which lowers pressure in venturi to below atmospheric pressure, causing fuel to be pushed through jets, etc., and into the venturi to be mixed with air and form a combustible air/fuel mixture.

Volt: The unit of measure for electrical pressure of electromotive force. Measured by a voltmeter in parallel with the circuit.

Watt: Unit of electrical power. Watts = amperes x volts.

In order to perform service work efficiently and to prevent costly errors, the technician should read the text in this manual, thoroughly familiarizing him/herself with procedures before beginning. Pictures and illustrations have been included with the text as an aid. Notes, cautions and warnings have also been included for clarification of text and safety concerns. However, a knowledge of mechanical theory, tool use and shop procedures is necessary to perform the service work safely and satisfactorily. Use only genuine Polaris service parts.

⚠ Cleanliness of parts and tools as well as the work area is of primary importance. Dirt and foreign matter will act as an abrasive and cause damage to precision parts. Clean the snowmobile before beginning service. Clean new parts before installing.

⚠ Watch for sharp edges which can cause personal injury, particularly in the area of the tunnel. Protect hands with gloves when working with sharp components.

⚠ If difficulty is encountered in removing or installing a component, look to see if a cause for the difficulty can be found. If it is necessary to tap the part into place, use a soft face hammer and tap lightly.

⚠ Some of the fasteners in the snowmobile were installed with locking agents. Use of impact drivers or wrenches will help avoid damage to fasteners.

⚠ Always follow torque specifications as outlined throughout this manual. Incorrect torquing may lead to serious machine damage or, as in the case of steering components, can result in injury or death for the rider(s).

⚠ If a torquing sequence is indicated for nuts, bolts or screws, start all fasteners in their holes and hand tighten. Then, following the method and sequence indicated in this manual, tighten evenly to the specified torque value. When removing nuts, bolts or screws from a part with several fasteners, loosen them all about 1/4 turn before removing them.

⚠ If the condition of any gasket or O-Ring is in question, replace it with a new one. Be sure the mating surfaces around the gasket are clean and smooth in order to avoid leaks.

⚠ Some procedures will require removal of retaining rings or clips. Because removal weakens and deforms these parts, they should always be replaced with new parts. When installing new retaining rings and clips use care not to expand or compress them beyond what is required for installation.

⚠ Because removal damages seals, replace any oil or grease seals removed with new parts.

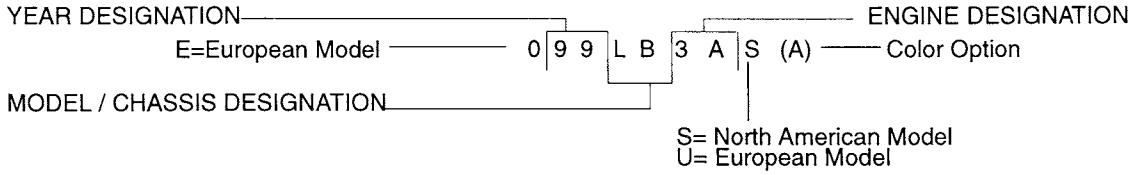
⚠ Polaris recommends the use of Polaris lubricants and greases, which have been specially formulated for the top performance and best protection of our machines. In some applications, such as the engine, warranty coverage may become void if other brands are substituted.

⚠ Grease should be cleaned from parts and fresh grease applied before reassembly of components. Deteriorating grease loses lubricity and may contain abrasive foreign matter.

⚠ Whenever removing or reinstalling batteries, care should be taken to avoid the possibility of explosion resulting in serious burns. Always disconnect the negative (black) cable first and reconnect it last. Battery electrolyte contains sulphuric acid and is poisonous! Serious burns can result from contact with the skin, eyes or clothing. **ANTIDOTE:** External - Flush with water. Internal - Drink large quantities or water or milk. Follow with milk of magnesia, beaten egg, or vegetable oil. Call physician immediately. Eyes - Flush with water for 15 minutes and get prompt medical attention.

MODEL NUMBER IDENTIFICATION

1999 MODEL DESIGNATION



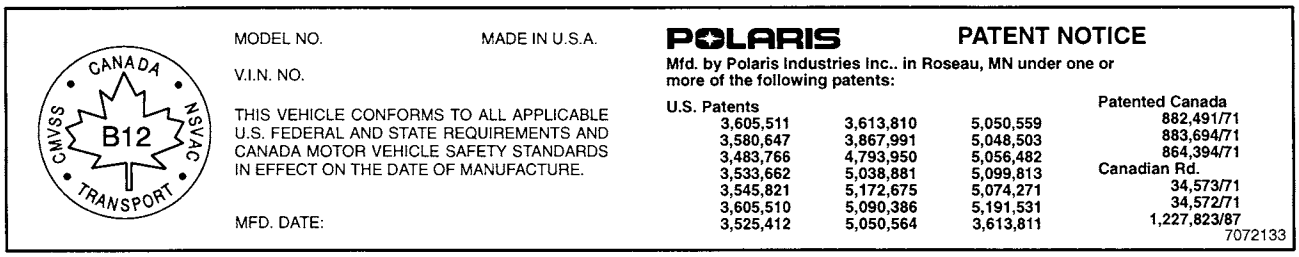
MODEL LINE (4TH DIGIT)	MODEL TYPE (5TH DIGIT)
A= Aggressive	B= Basic
S= Standard Indy	U= Utility
E= Evolved	D= Deluxe
L= Lite	P= Performance
	R= RMK
	X= Racer
	T= Touring
	S= SKS

1999
MODEL DESIGNATION
NUMBERS (Chassis)

LB - Indy 340
LD - Indy 340 Deluxe
LT - Indy 340 Touring
SU - Transport/WideTrak LX
ST - Sport Touring
SB - Sport/Supersport/500 XC/600 XC/700 XC
SP - XCF
ER - 500 RMK
EB - Indy 500/Trail/XLT LTD
ED - Indy 500 Classic/XLT Classic
ET - Classic Touring/Trail Touring/XLT Touring
SR - Trail RMK/600 RMK/700 RMK
AB - XLT Special/700 XCR/800 XCR
SX - 440 XCR
SP - 500 XC SP/600 XC SP/700 XC SP
SS - 700 SKS

1999
ENGINE DESIGNATION
NUMBERS

3A - 340 F/C Piston Port
4A - 440 F/C Cylinder Reed
4B - 488 L/C Piston Port
4C - 440 L/C Case Reed (domestic)
4D - 440 F/C Piston Port
4E - 488 F/C Piston Port
5A - 497 L/C Case Reed 2 Cylinder (domestic)
5B - 544 F/C Cylinder Reed
6A - 597 L/C 3 Cylinder
6D - 593 L/C Case Reed 2 Cylinder (domestic)
7A - 700 L/C Case Reed 2 Cylinder (domestic)
7B - 700 VES L/C Case Reed 3 Cylinder
8A - 800 VES L/C Case Reed 3 Cylinder



These numbers should be referred to in any correspondence regarding warranty, service or replacement parts.

The machine model and serial number identification decal is located on the right front side of the tunnel. The serial number is permanently stamped into the tunnel. The model number is embossed on the decal.

Whenever corresponding about an engine it is important that the engine model and serial numbers be called out. Laser engraved model and serial numbers are located on the crankcase (intake side).

MODEL: ..... INDY 340 / INDY 340 DELUXE / INDY 340 TOURING
MODEL NUMBER: . 099LB3AS / 099LD3AS / 099LT3AS
ENGINE MODEL: .. EC34-2PM051

CARBURETION

Type ..... VM30SS Mikuni
Main Jet 150
Pilot Jet 35
Jet Needle 5DP7-2
Needle Jet ..... 0-6(169)
Cutaway 2.5AL
Air Screw ..... 1.5 Turns
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .219"(5.55mm)
Idle Sync Gap
Under Cutaway ..... .240"(6.1mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	160 #2	150 #2	140 #2	135 #2
	900-1800 (3000-6000)	145 #2	140 #2	130 #2	125 #1
	1800-2700 (6000-9000)	130 #2	125 #2	120 #1	115 #1
	2700-3700 (9000-12000)	115 #2	115 #1	110 #1	105 #1

XXX #X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-90
Belt 3211058
Belt Width (Projected) . 1.250" (31.75mm)
Side Angle (Overall) .. 28°
Outside Circumference 43.313
Center Distance ..... 11" (280mm)
Shift Weights 10
Primary Spring ..... Silver/Gold
Secondary Spring .... Silver
Driven Helix ..... 36.5° A-1

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10	Silver/Gold	Silver	36.5° A-1	17-41 66 P 3/4 HYVO
	900-1800 (3000-6000)	10MB	Gold	Silver	36.5° A-1	17-41 66 P 3/4 HYVO
	1800-2700 (6000-9000)	10MW	Gold	Silver	36.5° A-1	17-41 66 P 3/4 HYVO
	2700-3700 (9000-12000)	10MW or 10MR	Blue Gold	Silver	36.5° A-1	17-41 66 P 3/4 HYVO

ENGINE

Type ..... Fan Cooled Piston Port
Displacement ..... 339 cc
Bore ..... 2.4528" (62.3mm)
Stroke ..... 2.1889" (55.6mm)
Piston / Cylinder Clearance ... 0.0031" - 0.0055"(0.08 - 0.14mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking 34A
Piston Ring Marking ..... RN
Piston ring end gap ..... .008"-.014"(.20mm-.36mm)
Head cc's (Uninstalled) 21.1cc
Head cc's (Installed) 17.3cc
Operating RPM±200 ..... 7000 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 4100 RPM
Cylinder Head Torque ..... 18-19 ft.lbs(2.5-2.8 kgm)
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... INDY 340 / INDY 340 DELUXE / INDY 340 TOURING
MODEL NUMBER: ... 099LB3AS / 099LD3AS / 099LT3AS
ENGINE MODEL: EC34-2PM051

ELECTRICAL

Flywheel I.D. FP-5439
CDI Marking CU6409
Alternator Output ... 180 Watts
Ignition Timing ..... 26.5° BTDC@3000RPM±1.5°
.145" BTDC (.129"-.161")
3.67mm BTDC (3.28-4.08mm)
Operating Timing 15.5° @ 7000 RPM
Spark Plug / Gap ... NGK BR8ES / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts (9 watts Touring)
Brake ..... 18 watts (18 watts Touring)
Voltage Regulator .. LR9 All (LR9 and LR2 for Deluxe)*
Electric Start ..... Option (Std. on Deluxe)
*LR9= Half wave voltage regulator
*LR2=Rectifier only for battery charging

CAPACITIES

Fuel Tank ..... 8.8 gallons (33.3 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... N / A
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Indy 340
Front Suspension .. 37 IFS
Maximum Width .... 37.25"(94.62cm)
Camber ..... 0"±5/16"(8mm)
Toe Out ..... 1/8"-1/4"(3-6.35mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 105#/in.
Front Spring Preload 3 shims
Front Vertical Travel 7 in.(17.78cm)
Rear Suspension ... XTRA Lite (121", 133.5")
Rear Travel ..... 10.0 in.(25.4cm) / (10.875 in.(27.62cm)Touring)
Front Track Shock .. Nitrex
Spring Rate ..... 80#/in.
Rear Track Shock .. Nitrex
Rear Springs ..... .393" / 80° (340/340 Dlx)*
Rear Springs ..... .359"(sq.) / 84° (Touring)
Track Type ..... 15"x121"x.66"(15"x133.5"x.82"Touring) / 38.1x307.34x1.68cm (38.1x339.09x2.18cmTour)
Track Tension ..... 3/8"-1/2" (9.65-12.7mm) slack with 10#(4.54kg) weight 16"(40.64cm) ahead of rear idler shaft
* The stock springs are the softest available for the Indy 340 and Indy 340 Deluxe.

CHAINCASE

Sprockets / Chain .... 17-41, 66 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Std Mechanical
Chaincase Center Dist. 6 5/8"(16.83cm)
Driveshaft Sprockets . 2 drivers
Brake Type ..... Mechanical Disc

OPTIONAL REAR TORSION SPRINGS

INDY 340 AND INDY 340 DELUXE **INDY 340 TOURING**

MEDIUM	FIRM	SOFT	FIRM
.393" diameter / 77°	**.406" diameter / 82°**	**.347" diameter / 77°**	**.359" diameter / 77°**
L.H. - 7041555-067	L.H. - 7041521-067	L.H. - 7041627-067	7041629-067
R.H. - 7041556-067	R.H. - 7041522-067	R.H. - 7041628-067	7041630-067

MODEL: ..... INDY SPORT
MODEL NUMBER: . 099SB4DS
ENGINE MODEL: .. EC44-3PM025

CARBURETION

Type ..... VM34SS Mikuni
Main Jet 185
Pilot Jet 35
Jet Needle 6FJ6-3
Needle Jet ..... P-8(166)
Cutaway 2.0
Air Screw ..... 1.0 Turns
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .180" - (4.57mm)
Idle Sync Gap
Under Cutaway ..... .200" -(5.1mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	195 #3	185 #3	175 #3	165 #2
	900-1800 (3000-6000)	185 #3	170 #3	160 #2	150 #2
	1800-2700 (6000-9000)	165 #3	155 #2	145 #2	135 #2
	2700-3700 (9000-12000)	150 #2	145 #2	135 #2	125 #2

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-90
Belt 3211059
Belt Width (Projected) . 1.250" (31.75mm)
Side Angle (Overall) .. 28°
Outside Circumference 45.125
Center Distance ..... 12" (305mm)
Shift Weights ..... 10 AL
Primary Spring ..... Red/White
Secondary Spring .... Red
Driven Helix ..... 36.5° B-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10 AL	Red/White	Red	36.5° B-2	19-39 66 P 3/4 HYVO
	900-1800 (3000-6000)	10	Red/White	Red	36.5° B-2	19-39 66 P 3/4 HYVO
	1800-2700 (6000-9000)	10 AL	Gold	Red	36.5° B-2	19-39 66 P 3/4 HYVO
	2700-3700 (9000-12000)	10MB or 10 Bushed	Red/White Gold	Red	36.5° B-2	19-39 66 P 3/4 HYVO

ENGINE

Type ..... Fan Cooled Piston Port
Displacement ..... 432 cc
Bore ..... 2.6661" (67.72mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0035" - 0.0055"(0.09 - 0.14mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Identification Marking .. M-6
Piston Ring Marking ..... R
Piston Ring End Gap ..... .008"-.019"(.20-.49mm)
Head cc's (Uninstalled) 28.6cc
Head cc's (Installed) 23cc
Operating RPM±200 ..... 7000 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 4000 RPM
Cylinder Head Torque ..... 18-19 ft.lbs(2.5-2.8 kgm)
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... INDY SPORT
MODEL NUMBER: . 099SB4DS
ENGINE MODEL: .. EC44-3PM025

ELECTRICAL

Flywheel I.D. FP-5446
CDI Marking CU6416
Alternator Output ... 200 Watts
Ignition Timing ..... 26° BTDC@3000RPM±1.5°
.150" BTDC (.133"-.167")
3.81mm BTDC (3.39-4.25mm)
Operating Timing ... 16° @ 6500 RPM
Spark Plug / Gap ... NGK BR8ES / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR9
Electric Start ..... Option
*LR9= Half wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... N / A
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. 41 IFS
Maximum Width .... 41.00"(104.14cm)
Camber ..... 9/16"±5/16"(14±8mm)
Toe Out ..... 0-1/8"(0-3mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 105#/in.
Front Spring Preload 1 shims
Front Vertical Travel 7.56 in.(19.20cm)
Rear Suspension ... XTRA Lite
Rear Travel ..... 10.00 in.(25.40cm)
Front Track Shock .. Nitrex
Spring Rate ..... 80#/in.
Rear Track Shock .. Nitrex
Rear Springs ..... .406" / 82°
Track Type ..... 15"x121"x.71"(38.1x307.34x1.80cm)
Track Tension ..... 3/8" - 1/2" (9.67-12.7mm) - slack with 10#(4.54kg) weight16"(40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 19-39, 66 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 6 5/8"(16.83cm)
Driveshaft Sprockets . 2 drivers
Brake Type ..... Polaris HPB

OPTIONAL REAR TORSION SPRINGS

SOFT	MEDIUM (STD)	FIRM
.393" diameter / 77°	**.406" diameter / 82°**	**.406" diameter / 77°**
L.H. 7041555-067	L.H. 7041521-067	L.H. 7041463-067
R.H. 7041556-067	R.H. 7041522-067	R.H. 7041464-067

MODEL: ..... INDY SPORT TOURING
MODEL NUMBER: . 099ST4DS
ENGINE MODEL: .. EC44-3PM025

CARBURETION

Type ..... VM34SS Mikuni
Main Jet 185
Pilot Jet 35
Jet Needle 6FJ6-3
Needle Jet ..... P-8(166)
Cutaway ..... 2.0 CH
Air Screw ..... 1.0 Turns
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .180" - (4.57mm)
Idle Sync Gap
Under Cutaway ..... .200" -(5.1mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	195 #3	185 #3	175 #3	165 #2
	900-1800 (3000-6000)	185 #3	170 #3	160 #2	150 #2
	1800-2700 (6000-9000)	165 #3	155 #2	145 #2	135 #2
	2700-3700 (9000-12000)	150 #2	145 #2	135 #2	125 #2

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-90
Belt 3211059
Belt Width (Projected) . 1.250" (31.75mm)
Side Angle (Overall) .. 28°
Outside Circumference 45.125
Center Distance ..... 12" (305mm)
Shift Weights 10
Primary Spring ..... Brown
Secondary Spring .... Red
Driven Helix ..... 36.5° B-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10	Brown	Red	36.5° B-2	17-41 66 P 3/4 HYVO
	900-1800 (3000-6000)	10 M Bushed	Brown	Red	36.5° B-2	17-41 66 P 3/4 HYVO
	1800-2700 (6000-9000)	10 M Bushed	Gold	Red	36.5° B-2	17-41 66 P 3/4 HYVO
	2700-3700 (9000-12000)	10MB Bushed	Gold	Red	36.5° B-2	17-41 66 P 3/4 HYVO

ENGINE

Type ..... Fan Cooled Piston Port
Displacement ..... 432 cc
Bore ..... 2.6661" (67.72mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0035" - 0.0055"(0.09 - 0.14mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking M-6
Piston Ring Marking ..... R
Piston Ring End Gap ..... .008"-.019"(.20-.49mm)
Head cc's (Uninstalled) 28.6cc
Head cc's (Installed) 23cc
Operating RPM±200 ..... 7000 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 3500 RPM
Cylinder Head Torque ..... 18-19 ft.lbs(2.5-2.8 kgm)
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... INDY SPORT TOURING
MODEL NUMBER: . 099ST4DS
ENGINE MODEL: .. EC44-3PM025

ELECTRICAL

Flywheel I.D. FP-5446
CDI Marking CU6416
Alternator Output ... 200 Watts
Ignition Timing ..... 26° BTDC@3000RPM±1.5°
.150" BTDC (.133"-.167")
3.81mm BTDC (3.39-4.25mm)
Operating Timing ... 16° @ 6500 RPM
Spark Plug / Gap ... NGK BR8ES / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR9
Electric Start ..... Option
*LR9= Half wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... N / A
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. 41 IFS
Maximum Width .... 41.00"(104.14cm)
Camber ..... 9/16"±5/16"(14±8mm)
Toe Out ..... 0-1/8"(0-3mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 105#/in.
Front Spring Preload 0.13" Thread Adjust
Front Vertical Travel 7.56 in.(19.20cm)
Rear Suspension ... XTRA Lite
Rear Travel ..... 10.875 in.(25.40cm)
Front Track Shock .. Nitrex
Spring Rate ..... 80#/in.
Rear Track Shock .. Nitrex
Rear Springs ..... .359"(sq.) / 84°
Track Type ..... 15"x133.5"x.82"(38.1x339.09x2.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm)slack with 10# (4.54kg)weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 17-41, 66 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 6 5/8"(16.83cm)
Driveshaft Sprockets . 2 drivers
Brake Type ..... Polaris HPB

OPTIONAL REAR TORSION SPRINGS

SOFT	MEDIUM (STD)	FIRM
.347" (sq.) diameter / 77°	**.359"(sq.) diameter / 84°**	**.359" (sq.) diameter / 77°**
L.H. 7041627-067	L.H. 7041763-067	L.H. 7041629-067
R.H. 7041628-067	R.H. 7041764-067	R.H. 7041630-067

MODEL: ..... INDY TRANSPORT
MODEL NUMBER: . 099SU4DS
ENGINE MODEL: .. EC44-3PM025

CARBURETION

Type ..... VM34SS Mikuni
Main Jet 185
Pilot Jet 35
Jet Needle 6FJ6-3
Needle Jet ..... P-8(166)
Cutaway ..... 2.0 CH
Air Screw ..... 1.0 Turns
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .180" - (4.57mm)
Idle Sync Gap
Under Cutaway ..... .200" -(5.1mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	195 #3	185 #3	175 #3	165 #2
	900-1800 (3000-6000)	185 #3	170 #3	160 #2	150 #2
	1800-2700 (6000-9000)	165 #3	155 #2	145 #2	135 #2
	2700-3700 (9000-12000)	150 #2	145 #2	135 #2	125 #2

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-90
Belt 3211059
Belt Width (Projected) . 1.250" (31.75mm)
Side Angle (Overall) .. 28°
Outside Circumference 45.125
Center Distance ..... 12" (305mm)
Shift Weights 10
Primary Spring ..... Brown
Secondary Spring .... Red
Driven Helix ..... 36.5° B-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10	Brown	Red	36.5° B-2	16-39 64 P 3/4 HYVO
	900-1800 (3000-6000)	10 M Bushed	Brown	Red	36.5° B-2	16-39 64 P 3/4 HYVO
	1800-2700 (6000-9000)	10 M Bushed	Gold	Red	36.5° B-2	16-39 64 P 3/4 HYVO
	2700-3700 (9000-12000)	10MB Bushed	Gold	Red	36.5° B-2	16-39 64 P 3/4 HYVO

ENGINE

Type ..... Fan Cooled Piston Port
Displacement ..... 432 cc
Bore ..... 2.6661" (67.72mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0035" - 0.0055"(0.09 - 0.14mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking M-6
Piston Ring Marking ..... R
Piston Ring End Gap ..... .008"-.019"(.20-.49mm)
Head cc's (Uninstalled) 28.6cc
Head cc's (Installed) 23cc
Operating RPM±200 ..... 7000 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 3500 RPM
Cylinder Head Torque ..... 18-19 ft.lbs(2.5-2.8 kgm)
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... INDY TRANSPORT
MODEL NUMBER: . 099SU4DS
ENGINE MODEL: .. EC44-3PM025

ELECTRICAL

Flywheel I.D. FP-5446
CDI Marking CU6416
Alternator Output ... 200 Watts
Ignition Timing ..... 26° BTDC@3000RPM±1.5°
.150" BTDC (.133"-.167")
3.81mm BTDC (3.39-4.25mm)
Operating Timing ... 16° @ 6500 RPM
Spark Plug / Gap ... NGK BR8ES / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 8 watts
Brake ..... 29 watts
Voltage Regulator .. LR9
Electric Start ..... Option
*LR9= Half wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... N / A
Chaincase Oil ..... 9 fl.oz(265cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. 41 IFS
Maximum Width .... 41.00"(104.14cm)
Camber ..... 9/16"±5/16"(14±8mm)
Toe Out ..... 0-1/8"(0-3mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 105#/in.
Front Spring Preload 5 shims
Front Vertical Travel 7.56 in.(19.20cm)
Rear Suspension ... 141 GT
Rear Travel ..... 7 in.(17.78cm)
Front Track Shock .. Nitrex
Spring Rate ..... 181#/in.
Rear Track Shock .. Nitrex
Rear Springs ..... .406" / 75°
Track Type ..... 15"x141"x1.125" (38.1x358.14x2.86cm)
Track Tension ..... 3/4" - 1" (19.05 - 25.4mm)slack with 10# (4.54kg)weight 16" (40.64cm)ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 16-39, 64 P 3/4 HYVO
Reverse ..... Standard
Brake Pads ..... Type 69
Chaincase Center Dist.6 5/8"(16.83cm)
Driveshaft Sprockets . 2 drivers
Brake Type ..... Polaris HPB

OPTIONAL REAR TORSION SPRINGS

SOFT	MEDIUM (STD)	FIRM
.375" diameter / 75°	**.406" diameter / 75°**	**.468" diameter / 74°**
L.H. 7041318-067	L.H. 7041320-067	L.H. 7041239-067
R.H. 7041319-067	R.H. 7041321-067	R.H. 7041240-067

GENERAL
1999 Model Specifications

MODEL: ..... XCF
MODEL NUMBER: . 099SP4AS
ENGINE MODEL: .. EC45PM011

CARBURETION

Type ..... VM34SS Mikuni
Main Jet 270
Pilot Jet 40
Jet Needle 6DP1-3
Needle Jet ..... P-8(480)
Cutaway 3.0
Air Screw ..... 1.0 Turns
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .218" - (5.54mm)
Idle Sync Gap
Under Cutaway ..... .240" -(6.1mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	290 #3	270 #3	250 #3	230 #3
	900-1800 (3000-6000)	250 #3	240 #3	220 #3	195 #2
	1800-2700 (6000-9000)	220 #3	200 #3	180 #2	165 #2
	2700-3700 (9000-12000)	180 #3	170 #2	150 #2	135 #2

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.25
Center Distance ..... 12" (305mm)
Shift Weights 10-58
Primary Spring ..... Dark Blue
Secondary Spring .... Silver
Driven Helix ..... 36° #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10-58 Bushed	Dark Blue	Silver	36° #-2	19-40 66 P 3/4 HYVO
	900-1800 (3000-6000)	10-56 Bushed	Dark Blue	Silver	36° #-2	19-40 66 P 3/4 HYVO
	1800-2700 (6000-9000)	10 56 Bushed	Dark Blue	Silver Blue	36° #-2	19-40 66 P 3/4 HYVO
	2700-3700 (9000-12000)	10 54 Bushed	Dark Blue	Silver Blue	36° #-2	19-40 66 P 3/4 HYVO

ENGINE

Type ..... Fan Cooled Cylinder Reed
Displacement ..... 431 cc
Bore ..... 2.559" (65mm)
Stroke ..... 2.559" (65mm)
Piston / Cylinder Clearance ... 0.0039" - 0.0053"(0.10 - 0.135mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking 4MB
Pistn Ring Marking ..... N
Piston Ring End Gap ..... .009"-.017"(.24-.45mm)
Head cc's (Uninstalled) ..... 26.2 cc
Head cc's (Installed) ..... 23.2 cc
Operating RPM±200 ..... 6500 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 4000 RPM
Cylinder Head Torque ..... 18-19 ft.lbs(2.5-2.8 kgm)
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... XCF
MODEL NUMBER: . 099SP4AS
ENGINE MODEL: .. EC45PM011

ELECTRICAL

Flywheel I.D. F004T32971
CDI Marking F6291A
Alternator Output ... 240 Watts @ 4000 RPM
Ignition Timing ..... 27° BTDC@3000RPM±1.5°
0.175" BTDC (0.157"-0.195")
4.45mm BTDC (3.97-4.93mm)
Operating Timing ... 17° @ 6500 RPM
Spark Plug / Gap ... NGK BR9ES / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR9
Electric Start ..... Option
*LR9= Half wave voltage regulator

CAPACITIES

Fuel Tank ..... 10.5 gallons (39.7 liters)
Oil Tank ..... 3 quarts (2.8 liters)
Coolant ..... N / A
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. XTRA-10 CRC
Maximum Width .... 41.00"(104.14cm)
Camber ..... 3/4"±5/16"(19.05±8mm)
Toe Out ..... 3/8"-1/2"(9.65-12.7mm)
Front Shocks ..... Indy Select
IFS Spring Rate .... 80#/in.
Front Spring Preload .06" Thread Adjust
Front Vertical Travel 9.30 in.(23.62cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 10.0 in.(25.4cm)
Front Track Shock .. Ryde FX
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Ryde AFX
Rear Springs ..... .406" / 77°
Track Type ..... 15"x121"x.82" (38.1x307.34x2.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 19-40, 66 P 3/4HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 6 5/8"(16.83cm)
Driveshaft Sprockets . 2 Drivers
Brake Type ..... Polaris HPB

OPTIONAL REAR TORSION SPRINGS

SOFT(STD)	MEDIUM	FIRM
.406" diameter/77°	**.421" diameter/77°**	**.437" diameter/77°**
L.H .7041463-067	L.H. 7041461-067	L.H. 7041465-067
R.H. 7041464-067	R.H 7041462-067	R.H. 7041466-067

GENERAL
1999 Model Specifications

MODEL: ..... 440 XCR
MODEL NUMBER: . 099SX4CS
ENGINE MODEL: .. S44-44-98A1

CARBURETION

Type ..... VM34SS Mikuni
Main Jet 360
Pilot Jet 45
Jet Needle 6DH7-3
Needle Jet ..... P-4(286)
Cutaway ..... 2.0 CH
Air Screw ..... 1.25 Turns
Valve Seat ..... 1.5 Viton
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .189" - (4.80mm)(3/16")
Idle Sync Gap
Under Cutaway ..... .208" -(5.3mm)(13/64")

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	380 #3	360 #3	340 #3	320 #3
	900-1800 (3000-6000)	340 #3	320 #3	300 #3	280 #3
	1800-2700 (6000-9000)	300 #3	290 #3	270 #3	250 #3
	2700-3700 (9000-12000)	270 #3	250 #3	240 #3	220 #3

XXX #X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211074
Belt Width (Projected) . 1.438" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.625
Center Distance ..... 12" (305mm)
Shift Weights ..... S-53 Red
Primary Spring ..... Almond Gold
Secondary Spring .... Silver/Blue
Driven Helix ..... R-8 #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	S-53 Red	Almond Gold	Silver/ Blue	R8 #-2	20-39 68 P 3/4 HYVO
	900-1800 (3000-6000)	S-53 Blue	Almond Gold	Silver/ Blue	R8 #-2	20-39 68 P 3/4 HYVO
	1800-2700 (6000-9000)	10M Blue Bushed	Almond Gold	Silver/ Blue	R8 #-3	20-39 68 P 3/4 HYVO
	2700-3700 (9000-12000)	10M White Bushed	Almond Gold	Silver/ Blue	R32 #-3	20-39 68 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Case Reed
Displacement ..... 438 cc
Bore ..... 2.598" (66mm)
Stroke ..... 2.520" (64mm)
Piston / Cylinder Clearance ... 0.0023" - 0.0037"(0.06 - 0.095mm)
Service Limit ..... 0.0059" (0.15mm)
Piston Marking EK2185B
Piston Ring Marking ..... "o" faces upward
Piston Ring End Gap ..... .008"-.020"(.20-.51mm)
Head cc's (Uninstalled) ..... 19.6 cc
Head cc's (Installed) ..... 18.5 cc
Operating RPM±200 ..... 8250 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 5000 RPM
Cylinder Head Torque ..... 20-24 ft.lbs(2.8-3.3 kgm)
Cylinder Base Nut Torque .... 30-34 ft.lbs(4.15-4.7 kgm)
Crankcase Torque (8mm) .... 20-24 ft.lbs(2.8-3.3 kgm)
Crankcase Torque (10mm) ... N/A
Flywheel Torque ..... 90 ft.lbs(12.4 kgm)

MODEL: ..... 440 XCR
MODEL NUMBER: . 099SX4CS
ENGINE MODEL: .. S44-44-98A1

ELECTRICAL

Flywheel I.D. 4060141
CDI Marking 4060190
Alternator Output ... 280 Watts
Ignition Timing ..... 25° BTDC@3500RPM±1.5°
0.146" BTDC (±0.017")
3.72mm BTDC (±0.435mm)
Operating Timing ... 16° @ 8250 RPM
Spark Plug / Gap ... Champion RN-2C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@2 watts
Brake ..... 1@17 watts
Voltage Regulator .. LR7
Electric Start ..... N/A
*LR7= Full wave voltage regulator

CAPACITIES

Fuel Tank ..... 10.5 gallons (39.7 liters)
Oil Tank ..... 3 quarts (2.8 liters)
Coolant ..... 3 Quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. XC-10, CRC
Maximum Width .... 41.00"(104.14cm)
Camber ..... 1.05"±5/16"(26.67±8mm)
Toe Out ..... 0-1/8"(0-3mm)
Front Shocks ..... Fox™ IFP
IFS Spring Rate .... 74-120#/in.
Front Spring Preload 0.75" Thread Adjust
Front Vertical Travel 9.0 in.(22.86cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 8.0 in.(20.32cm)
Front Track Shock .. Fox™ IFP
Spring Rate ..... 190#/in.
Rear Track Shock .. Fox™ IFP with Remote Reservoir
Rear Springs ..... .359" (sq.) / 77°
Track Type ..... 15"x121"x.82" (38.1x307.34x2.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 20-39, 68 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 7.05"(17.90cm)
Driveshaft Sprockets . 2 Drivers-wide
Brake Type ..... Polaris HPB Liquid Cooled

OPTIONAL REAR TORSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

GENERAL
1999 Model Specifications

MODEL: ..... TRAIL
MODEL NUMBER: . 099EB4ES(A)
ENGINE MODEL: .. EC50PM044

CARBURETION

Type ..... VM34SS Mikuni
Main Jet 230
Pilot Jet 40
Jet Needle 6DH7-3
Needle Jet ..... P-8(166)
Cutaway ..... 3.0 CH
Air Screw ..... 1.0 Turns
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .219" -(5.55mm)
Idle Sync Gap
Under Cutaway ..... .240" -(6.1mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	240 #3	230 #3	220 #3	210 #3
	900-1800 (3000-6000)	220 #3	210 #3	200 #3	190 #2
	1800-2700 (6000-9000)	200 #3	195 #3	185 #2	180 #2
	2700-3700 (9000-12000)	190 #3	180 #2	180 #2	180 #2

XXX #X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250
Center Distance ..... 12" (305mm)
Shift Weights ..... 10 AL Bushed
Primary Spring ..... Red/White
Secondary Spring .... Silver
Driven Helix ..... 36° #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10 AL Bushed	Red/White	Silver	36° #-2	22-41 68 P 3/4 HYVO
	900-1800 (3000-6000)	10 M Bushed	Red/White	Silver	36° #-2	22-41 68 P 3/4 HYVO
	1800-2700 (6000-9000)	10 MB Bushed	Red/White	Silver	36 #-2	22-41 68 P 3/4 HYVO
	2700-3700 (9000-12000)	10 MB Bushed	Red/White	Silver	36° #-2	22-41 68 P 3/4 HYVO

ENGINE

Type ..... Fan Cooled Piston Port
Displacement ..... 488 cc
Bore ..... 2.8346" (72mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0039" - 0.0063"(0.10 - 0.16mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking M-1
Piston Ring Marking ..... R
Piston ring end gap ..... .008"-.019"(.20-.49mm)
Head cc's (Uninstalled) 26.7cc
Head cc's (Installed) 24.1cc
Operating RPM±200 ..... 7000 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 3600 RPM
Cylinder Head Torque ..... 18-19 ft.lbs(2.5-2.8 kgm)
Cylinder Base Nut Torque .... 30-34 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... TRAIL
MODEL NUMBER: . 099EB4ES(A)
ENGINE MODEL: .. EC50PM044

ELECTRICAL

Flywheel I.D. FP5441
CDI Marking CU6413
Alternator Output ... 200 Watts
Ignition Timing ..... 26° BTDC@3000RPM±1.5°
0.150" BTDC (±0.017")
3.81mm BTDC (±0.43mm)
Operating Timing ... 16° @6500 RPM
Spark Plug / Gap ... NGK BR8ES / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR9
Electric Start ..... Option
*LR9= Half wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... N/A
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Evolved
Front Suspension .. XTRA-10
Maximum Width .... 42.50"(107.95cm)
Camber ..... 0"±5/16"(0±8mm)
Toe Out ..... 1/8-1/4"(3-6.35mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 80#/in.
Front Spring Preload 0.5" Thread Adjust
Front Vertical Travel 10.0 in.(25.4cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 10.0 in.(25.4cm)
Front Track Shock .. Nitrex
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Indy Select
Rear Springs ..... .406" / 77°
Track Type ..... 15"x121"x.82" (38.1x307.34x2.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 22-41, 68 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 6 5/8"(16.83cm)
Driveshaft Sprockets . 2 drivers
Brake Type ..... Hydraulic Disc

OPTIONAL REAR TORSION SPRINGS

SOFT(STD)	MEDIUM	FIRM
.406" diameter/77°	**.421" diameter/77°**	**.437" diameter/77°**
L.H 7041463-067	L.H. 7041461-067	L.H. 7041465-067
R.H. 7041464-067	R.H 7041462-067	R.H. 7041466-067

MODEL: ..... TRAIL TOURING
MODEL NUMBER: . 099ET4ES(A)
ENGINE MODEL: .. EC50PM044

CARBURETION

Type ..... VM34SS Mikuni
Main Jet 230
Pilot Jet 40
Jet Needle 6DH7-3
Needle Jet ..... P-8(166)
Cutaway ..... 3.0 CH
Air Screw ..... 1.0 Turns
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .219" - (5.55mm)
Idle Sync Gap
Under Cutaway ..... .240" -(6.1mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	240 #3	230 #3	220 #3	210 #3
	900-1800 (3000-6000)	220 #3	210 #3	200 #3	190 #2
	1800-2700 (6000-9000)	200 #3	195 #3	185 #2	180 #2
	2700-3700 (9000-12000)	190 #3	180 #2	180 #2	180 #2

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250
Center Distance ..... 12" (305mm)
Shift Weights ..... 10 Bushed
Primary Spring ..... Red/White
Secondary Spring .... Silver
Driven Helix ..... 36° #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10 Bushed	Red/White	Silver	36° #-2	20-40 66 P 3/4 HYVO
	900-1800 (3000-6000)	10 M Bushed	Red/White	Silver	36° #-2	20-40 66 P 3/4 HYVO
	1800-2700 (6000-9000)	10 MB Bushed	Red/White	Silver	36° #-2	20-40 66 P 3/4 HYVO
	2700-3700 (9000-12000)	10 MB Bushed	Red/White	Silver	36° #-2	20-40 66 P 3/4 HYVO

ENGINE

Type ..... Fan Cooled Piston Port
Displacement ..... 488 cc
Bore ..... 2.8346" (72mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0039" - 0.0063"(0.10 - 0.16mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking M-1
Piston Ring Marking ..... R
Piston Ring End Gap ..... .008"-.019"(.20-.49mm)
Head cc's (Uninstalled) 26.7cc
Head cc's (Installed) 24.1cc
Operating RPM±200 ..... 7000 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 3600 RPM
Cylinder Head Torque ..... 18-19 ft.lbs(2.5-2.8 kgm)
Cylinder Base Nut Torque .... 30-34 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... TRAIL TOURING
MODEL NUMBER: . 099ET4ES(A)
ENGINE MODEL: .. EC50PM044

ELECTRICAL

Flywheel I.D. FP5441
CDI Marking CU6413
Alternator Output ... 200 Watts
Ignition Timing ..... 26° BTDC@3000RPM±1.5°
0.150" BTDC (±0.017")
3.81mm BTDC (±0.43mm)
Operating Timing ... 16° @ 6500 RPM
Spark Plug / Gap ... NGK BR8ES / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR9, LR2
Electric Start ..... Standard
*LR9= Half wave voltage regulator
*LR2=Rectifier only for battery charging

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... N/A
Chaincase Oil ..... 9 fl.oz(265cc)

SUSPENSION / CHASSIS

Body Style ..... Evolved
Front Suspension .. XTRA-10
Maximum Width .... 42.50"(107.95cm)
Camber ..... 0"±5/16"(0-8 mm)
Toe Out ..... 1/8-1/4"(3-6.35mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 80#/in.
Front Spring Preload 0.13" Thread Adjust
Front Vertical Travel 10.0 in.(25.4cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 11.5 in.(29.21cm)
Front Track Shock .. Nitrex
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Indy Select
Rear Springs ..... .437" / 77°
Track Type ..... 15"x133.5"x.82" (38.1x339.09x2.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 20-40, 66 P 3/4 HYVO
Reverse ..... Standard
Brake Pads ..... Type 69
Chaincase Center Dist. 6 5/8"(16.83cm)
Driveshaft Sprockets . 2 Drivers
Brake Type ..... Hydraulic Disc

OPTIONAL REAR TORSION SPRINGS

SOFT	MEDIUM	FIRM(STD)
.406" diameter/77°	**.421" diameter/77°**	**.437" diameter/77°**
L.H 7041463-067	L.H. 7041461-067	L.H. 7041465-067
R.H. 7041464-067	R.H 7041462-067	R.H. 7041466-067

MODEL: ..... TRAIL RMK
MODEL NUMBER: . 099SR5BS
ENGINE MODEL: .. EC55PM021

CARBURETION

Type ..... VM34SS Mikuni (ACCS)
Main Jet 270
Pilot Jet 35
Jet Needle 6DH7-3
Needle Jet ..... Q-0(480)
Cutaway 3.0
Air Screw ..... 1.5 Turns
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or
89 Oxygenated
Throttle Gap
Under Cutaway ..... .218" - (5.54mm)
Idle Sync Gap
Under Cutaway ..... .242" -(6.15mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	310 #4	290 #4	270 #4	260 #4
	900-1800 (3000-6000)	310 #4	290 #4	270 #3	260 #3
	1800-2700 (6000-9000)	310 #3	290 #3	**270 #3**	260 #3
	2700-3700 (9000-12000)	310 #3	290 #3	270 #3	260 #3

XXX
#X - # refers to the clip position from top of jet needle.

[ ] - Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250
Center Distance ..... 12" (305mm)
Shift Weights ..... 10-56 Bushed
Primary Spring ..... Dark Blue
Secondary Spring .... Silver/Blue
Driven Helix ..... R-32 #2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10-60 Bushed	Dark Blue	Silver/ Blue	R-32 #-2	18-41 68 P 3/4 HYVO
	900-1800 (3000-6000)	10-58 Bushed	Dark Blue	Silver/ Blue	R-32 #-2	18-41 68 P 3/4 HYVO
	1800-2700 (6000-9000)	10-56 Bushed	Dark Blue	Silver/ Blue	R-32 #-2	18-41 68 P 3/4 HYVO
	2700-3700 (9000-12000)	10-54 Bushed	Dark Blue	Silver/ Blue	R-32 #-2	18-41 68 P 3/4 HYVO

ENGINE

Type ..... Fan Cooled Reed Assist
Displacement ..... 544 cc
Bore ..... 2.874" (73mm)
Stroke ..... 2.559" (65mm)
Piston / Cylinder Clearance ... 0.0041" - 0.0055"(0.104 - 0.139mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking 5MB
Piston Ring Marking ..... N
Piston Ring End Gap ..... .015"-.022"(.40-.55mm)
Head cc's (Uninstalled) ..... 33.8 cc
Head cc's (Installed) ..... 27.7 cc
Operating RPM±200 ..... 6800 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 3600 RPM
Cylinder Head Torque ..... 18-19 ft.lbs(2.5-2.8 kgm)
Cylinder Base Nut Torque .... 30-34 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... TRAIL RMK
MODEL NUMBER: . 099SR5BS
ENGINE MODEL: .. EC55PM021

ELECTRICAL

Flywheel I.D. F004T32971
CDI Marking F6291A
Alternator Output ... 240 Watts@4000 RPM
Ignition Timing ..... 27° BTDC@3000RPM±1.5°
0.175" BTDC (0.157-0.195")
4.45mm BTDC (3.97-4.93mm)
Operating Timing ... 17° @ 6500 RPM
Spark Plug / Gap ... NGK BR8ES / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR9
Electric Start ..... Option
*LR9= Half wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 3 quarts (2.8 liters)
Coolant ..... N/A
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. 38 RMK
Maximum Width .... 38.00"(96.52cm)
Camber ..... 0"±5/16"(0-8mm)
Toe Out ..... 1/8"-1/4"(3-6.35mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 80#/in.
Front Spring Preload 0.3" Thread Adjust
Front Vertical Travel 8.18 in.(20.78cm)
Rear Suspension ... XTRA-Lite 136
Rear Travel ..... 12.0 in.(30.48cm)
Front Track Shock .. Hydraulic
Spring Rate ..... 181#/in.
Rear Track Shock .. Indy Select
Rear Springs ..... .359"(sq) / 77°
Track Type ..... 15"x136"x1.25" (38.1x345.44x3.175cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 18-41, 68 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 7.05"(17.91cm)
Driveshaft Sprockets . 2 Drivers
Brake Type ..... Polaris HPB

OPTIONAL REAR TORSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

MODEL: ..... SUPER SPORT
MODEL NUMBER: . 099SB5BS
ENGINE MODEL: .. EC55PM011

CARBURETION

Type ..... VM34SS Mikuni
Main Jet 310
Pilot Jet 35
Jet Needle 6DH7-3
Needle Jet ..... Q-2(480)
Cutaway 3.0
Air Screw ..... 1.5 Turns
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .218" - (5.54mm)
Idle Sync Gap
Under Cutaway ..... .242" -(6.15mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	320 #3	**310 #3**	300 #3	300 #2
	900-1800 (3000-6000)	270 #3	260 #3	250 #3	240 #2
	1800-2700 (6000-9000)	220 #3	210 #3	200 #2	190 #2
	2700-3700 (9000-12000)	180 #3	170 #2	160 #2	150 #2

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250
Center Distance ..... 12" (305mm)
Shift Weights ..... 10-60 Bushed
Primary Spring ..... Dark Blue
Secondary Spring .... Silver/Blue
Driven Helix ..... 36° #2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10-60 Bushed	Dark Blue	Silver/ Blue	36° #-2	19-39 66 P 3/4 HYVO
	900-1800 (3000-6000)	10-58 Bushed	Dark Blue	Silver/ Blue	36° #-2	19-39 66 P 3/4 HYVO
	1800-2700 (6000-9000)	10-56 Bushed	Dark Blue	Silver/ Blue	36° #-2	19-39 66 P 3/4 HYVO
	2700-3700 (9000-12000)	10-54 Bushed	Dark Blue	Silver/ Blue	36° #-2	19-39 66 P 3/4 HYVO

ENGINE

Type ..... Fan Cooled Reed Assist
Displacement ..... 544 cc
Bore ..... 2.874" (73mm)
Stroke ..... 2.559" (65mm)
Piston / Cylinder Clearance ... 0.0041" - 0.0055"(0.104 - 0.139mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking 5MB
Piston Ring Marking ..... N
Piston Ring End Gap ..... .015"-.022"(.40-.55mm)
Head cc's (Uninstalled) ..... 33.8 cc
Head cc's (Installed) ..... 27.7 cc
Operating RPM±200 ..... 6500 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 3600 RPM
Cylinder Head Torque ..... 18-19 ft.lbs(2.5-2.8 kgm)
Cylinder Base Nut Torque .... 30-34 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... SUPER SPORT
MODEL NUMBER: . 099SB5BS
ENGINE MODEL: .. EC55PM011

ELECTRICAL

Flywheel I.D. F004T32971
CDI Marking F6291A
Alternator Output ... 240 Watts@4000 RPM
Ignition Timing ..... 27° BTDC@3000RPM±1.5°
0.175" BTDC (0.157"-0.195")
4.45mm BTDC (3.97-4.93mm)
Operating Timing ... 17° @ 6500 RPM
Spark Plug / Gap ... NGK BR8ES / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR9
Electric Start ..... Option
*LR9= Half wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 3 quarts (2.8 liters)
Coolant ..... N/A
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. XTRA-10
Maximum Width .... 42.50"(107.95cm)
Camber ..... 0"±5/16"(0±8mm)
Toe Out ..... 1/8"-1/4"(3-6.35mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 80#/in.
Front Spring Preload 0.5" Thread Adjust
Front Vertical Travel 10.0 in.(25.4cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 10.0 in.(25.4cm)
Front Track Shock .. Nitrex
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Indy Select
Rear Springs ..... .406" / 77°
Track Type ..... 15"x121"x.82"(38.1x307.34x2.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 19-39, 66 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist.6 5/8"(16.83cm)
Driveshaft Sprockets . 2 Drivers
Brake Type ..... Polaris HPB

OPTIONAL REAR TORSION SPRINGS

SOFT(STD)	MEDIUM	FIRM
.406" diameter/77°	**.421" diameter/77°**	**.437" diameter/77°**
L.H 7041463-067	L.H. 7041461-067	L.H. 7041465-067
R.H. 7041464-067	R.H 7041462-067	R.H. 7041466-067

GENERAL
1999 Model Specifications

MODEL: ..... INDY 500
MODEL NUMBER: . 099EB4BS(A)
ENGINE MODEL: .. EC50PL172

CARBURETION

Type ..... VM38SS Mikuni
Main Jet 350
Pilot Jet 45
Jet Needle 6F9-3
Needle Jet ..... P-6(247)
Cutaway ..... 2.5 CH
Air Screw ..... 3/4 Turn
Valve Seat ..... 1.5 Viton
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .219" - (5.55mm)
Idle Sync Gap
Under Cutaway ..... .240" -(6.1mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	370 #3	350 #3	330 #3	310 #3
	900-1800 (3000-6000)	330 #3	310 #3	290 #3	270 #2
	1800-2700 (6000-9000)	290 #3	270 #3	250 #2	230 #2
	2700-3700 (9000-12000)	250 #3	240 #2	220 #2	210 #2

XXX #X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250
Center Distance ..... 12" (305mm)
Shift Weights ..... 10M Bushed
Primary Spring ..... Gold
Secondary Spring .... Gold
Driven Helix ..... 36° #2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10M Bushed	Gold	Gold	36° #-2	22-41 68 P 3/4 HYVO
	900-1800 (3000-6000)	10M Blue Bushed	Gold	Gold	36° #-2	22-41 68 P 3/4 HYVO
	1800-2700 (6000-9000)	10M White Bushed	Dark Blue	Gold	36° #-2	22-41 68 P 3/4 HYVO
	2700-3700 (9000-12000)	10M Red Bushed	Dark Blue	Gold	36° #-2	22-41 68 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Piston Port
Displacement ..... 488 cc
Bore ..... 2.8346" (72mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0035" - 0.0049"(0.09 - 0.125mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking 5B
Piston Ring Marking 5B
Piston Ring End Gap ..... .008"-.016"(.20-.40mm)
Head cc's (Uninstalled) 28cc
Head cc's (Installed) 23.6cc
Operating RPM±200 ..... 7800 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 4000 RPM
Cylinder Head Torque ..... 8mm 17-20 ft.lbs, 10mm 24-26 ft.lbs
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... INDY 500
MODEL NUMBER: . 099EB4BS(A)
ENGINE MODEL: .. EC50PL172

ELECTRICAL

Flywheel I.D. FP5445
CDI Marking CU6417
Alternator Output ... 200 Watts
Ignition Timing ..... 28° BTDC@3000RPM±1.5°
0.173" BTDC (±0.0175")
4.40mm BTDC (±0.48mm)
Operating Timing ... 16° @ 7500 RPM
Spark Plug / Gap ... Champion RN-3C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@2 watts
Brake ..... 1@17 watts
Voltage Regulator .. LR9
Electric Start ..... Option
*LR9= Half wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Evolved
Front Suspension .. XTRA-10
Maximum Width .... 42.50"(107.95cm)
Camber ..... 0"±5/16"(0-8mm)
Toe Out ..... 1/8-1/4"(3-6.35mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 80#/in.
Front Spring Preload 0.5" Thread Adjust
Front Vertical Travel 10.0 in.(25.4cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 10.0 in.(25.4cm)
Front Track Shock .. Nitrex
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Indy Select
Rear Springs ..... .406" / 77°
Track Type ..... 15"x121"x.82" (38.1x307.34x2.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 22-41, 68 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 6 5/8"(16.83cm)
Driveshaft Sprockets . 2 Drivers
Brake Type ..... Hydraulic Disc

OPTIONAL REAR TORSION SPRINGS

SOFT(STD)	MEDIUM	FIRM
.406" diameter/77°	**.421" diameter/77°**	**.437" diameter/77°**
L.H 7041463-067	L.H. 7041461-067	L.H. 7041465-067
R.H. 7041464-067	R.H 7041462-067	R.H. 7041466-067

GENERAL
1999 Model Specifications

MODEL: ..... 500 CLASSIC
MODEL NUMBER: . 099ED4BS
ENGINE MODEL: .. EC50PL172

CARBURETION

Type ..... VM38SS Mikuni
Main Jet 350
Pilot Jet 45
Jet Needle 6F9-3
Needle Jet ..... P-6(247)
Cutaway ..... 2.5 CH
Air Screw ..... 3/4 Turn
Valve Seat ..... 1.5 Viton
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .219" 7/32"- (5.55mm)
Idle Sync Gap
Under Cutaway ..... .240" -15/64"(6.1mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	370 #3	**350 #3**	330 #3	310 #3
	900-1800 (3000-6000)	330 #3	310 #3	290 #3	270 #2
	1800-2700 (6000-9000)	290 #3	270 #3	250 #2	230 #2
	2700-3700 (9000-12000)	250 #3	240 #2	220 #2	210 #2

XXX
#X - # refers to the clip position from top of jet needle.

XXX - Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250
Center Distance ..... 12" (305mm)
Shift Weights ..... 10M Bushed
Primary Spring ..... Gold
Secondary Spring .... Gold
Driven Helix ..... 34° #2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10M Bushed	Gold	Gold	34° #-2	22-41 68 P 3/4 HYVO
	900-1800 (3000-6000)	10M Blue Bushed	Gold	Gold	34° #-2	22-41 68 P 3/4 HYVO
	1800-2700 (6000-9000)	10M White Bushed	Dark Blue	Gold	34° #-2	22-41 68 P 3/4 HYVO
	2700-3700 (9000-12000)	10M Red Bushed	Dark Blue	Gold	34° #-2	22-41 68 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Piston Port
Displacement ..... 488 cc
Bore ..... 2.8346" (72mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0035" - 0.0049"(0.09 - 0.125mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking 5B
Piston Ring Marking 5B
Piston Ring End Gap ..... .008"-.016"(.20-.40mm)
Head cc's (Uninstalled) 28cc
Head cc's (Installed) 23.6cc
Operating RPM±200 ..... 7800 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 4000 RPM
Cylinder Head Torque ..... 8mm 17-20 ft.lbs, 10mm 24-26 ft.lbs
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... 500 CLASSIC
MODEL NUMBER: . 099ED4BS
ENGINE MODEL: .. EC50PL172

ELECTRICAL

Flywheel I.D. FP5445
CDI Marking CU6417
Alternator Output ... 200 Watts
Ignition Timing ..... 28° BTDC@3000RPM±1.5°
0.173" BTDC (±0.0175")
4.40mm BTDC (±0.48mm)
Operating Timing ... 16° @ 7500 RPM
Spark Plug / Gap ... Champion RN-3C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@2 watts
Brake ..... 1@17 watts
Voltage Regulator .. LR9, LR2
Electric Start ..... Standard
*LR9= Half wave voltage regulator
*LR2=Rectifier only for battery charging

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 9 fl.oz(265cc)

SUSPENSION / CHASSIS

Body Style ..... Evolved
Front Suspension .. XTRA-12
Maximum Width .... 42.50"(107.95cm)
Camber ..... 0"±5/16"(0±8mm)
Toe Out ..... 1/8"-1/4"(3-6.35mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 65#/in.
Front Spring Preload 0.5" Thread Adjust
Front Vertical Travel 10 in.(25.4cm)
Rear Suspension ... XTRA-12
Rear Travel ..... 12.0 in.(30.48cm)
Front Track Shock .. Indy Select
Spring Rate ..... 75/125#/in.
Rear Track Shock .. Nitrex with 85# Spring
Rear Springs ..... .406" / 55°
Track Type ..... 15"x121"x.82" (38.1x307.34x2.08cm)
Track Tension ..... 1/2" (12.7mm) free hang 2" (5.08cm) behind rail bumper with no weight attached

CHAINCASE

Sprockets / Chain .... 22-41, 68 P 3/4 HYVO
Reverse ..... Standard
Brake Pads ..... Type 69
Chaincase Center Dist. 6 5/8"(16.83cm)
Driveshaft Sprockets . 2 Drivers
Brake Type ..... Hydraulic Disc

OPTIONAL REAR TORSION SPRINGS

SOFT(STD)	FIRM
.406" diameter/55°	**.421" diameter/55°**
L.H 7041394-067	L.H. 7041406-067
R.H. 7041395-067	R.H 7041407-067

MODEL: ..... INDY 500 RMK
MODEL NUMBER: . 099ER4BS
ENGINE MODEL: .. EC50PL162

CARBURETION

Type ..... VM34SS Mikuni (ACCS)
Main Jet 260
Pilot Jet 55
Jet Needle 6FJ43-3
Needle Jet ..... P-0(480)
Cutaway ..... 2.5 CH
Air Screw ..... 1.25 Turns
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .0.203" - (5.16mm)
Idle Sync Gap
Under Cutaway ..... 0.228" -(5.8mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	290 #4	270 #4	260 #4	240 #4
	900-1800 (3000-6000)	290 $4	270 #4	260 #3	240 #3
	1800-2700 (6000-9000)	290 #3	270 #3	260 #3	240 #3
	2700-3700 (9000-12000)	290 #3	270 #3	260 #3	240 #3

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250
Center Distance ..... 12" (305mm)
Shift Weights ..... 10MR Bushed
Primary Spring ..... Gold
Secondary Spring .... Red
Driven Helix ..... 34° #2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10M Bushed	Gold	Red	34° #-2	17-41 66 P 3/4 HYVO
	900-1800 (3000-6000)	10MB Bushed	Gold	Red	34° #-2	17-41 66 P 3/4 HYVO
	1800-2700 (6000-9000)	10MR Bushed	Dark Blue	Red	34° #-2	17-41 66 P 3/4 HYVO
	2700-3700 (9000-12000)	10-40 Bushed	Dark Blue	Red	34° #-2	17-41 66 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Piston Port
Displacement ..... 488 cc
Bore ..... 2.8346" (72mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0024" - 0.0037"(0.06 - 0.095mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking 5W
Piston Ring Marking 51A
Piston Ring End Gap ..... .008"-.016"(.20-.40mm)
Head cc's (Uninstalled) 28cc
Head cc's (Installed) 22cc
Operating RPM±200 ..... 7800 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 3800 RPM
Cylinder Head Torque ..... 8mm 17-20 ft.lbs, 10mm 24-26 ft.lbs
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... INDY 500 RMK
MODEL NUMBER: . 099ER4BS
ENGINE MODEL: .. EC50PL162

ELECTRICAL

Flywheel I.D. FP5445
CDI Marking CU6417
Alternator Output ... 200 Watts
Ignition Timing ..... 28° BTDC@3000RPM±1.5°
0.173" BTDC (±0.0175")
4.40mm BTDC (±0.48mm)
Operating Timing ... 16° @ 7500 RPM
Spark Plug / Gap ... Champion RN-3C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR9
Electric Start ..... Option
*LR9= Half wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Evolved
Front Suspension .. 38 RMK
Maximum Width .... 38.00"(96.52cm)
Camber ..... 0"±5/16"(0-8mm)
Toe Out ..... 3/8"-1/2"(9.65-12.7mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 80#/in.
Front Spring Preload 0.6" Thread Adjust
Front Vertical Travel 8.18 in.(20.78cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 11.5 in.(29.21cm)
Front Track Shock .. Nitrex
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Indy Select
Rear Springs ..... .359"(sq.) / 77°
Track Type ..... 15"x133.5"x1.25" (38.1x339.09x3.175cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 17-41, 66 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 6 5/8"(16.83cm)
Driveshaft Sprockets . 2 Drivers
Brake Type ..... Hydraulic Disc

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

GENERAL
1999 Model Specifications

MODEL: ..... CLASSIC TOURING
MODEL NUMBER: . 099ET4BS
ENGINE MODEL: .. EC50PL192

CARBURETION

Type ..... VM34SS Mikuni
Main Jet 250
Pilot Jet 40
Jet Needle 6EJ26-3
Needle Jet ..... P-2(480)
Cutaway ..... 3.0 CH
Air Screw ..... 3/4 Turn
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .218" - (5.54mm)
Idle Sync Gap
Under Cutaway ..... .240" -(6.1mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	260 #3	250 #3	240 #3	230 #3
	900-1800 (3000-6000)	240 #3	230 #3	220 #3	210 #2
	1800-2700 (6000-9000)	220 #3	210 #3	195 #2	185 #2
	2700-3700 (9000-12000)	200 #3	190 #2	180 #2	175 #2

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250
Center Distance ..... 12" (305mm)
Shift Weights ..... 10MB Bushed
Primary Spring ..... Gold
Secondary Spring .... Silver
Driven Helix ..... 34° #2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10MB Bushed	Gold	Silver	34° #-2	19-40 66 P 3/4 HYVO
	900-1800 (3000-6000)	10MB Bushed	Blue	Silver	34° #-2	19-40 66 P 3/4 HYVO
	1800-2700 (6000-9000)	10MW	Blue	Silver	34° #-2	19-40 66 P 3/4 HYVO
	2700-3700 (9000-12000)	10MR Bushed	Blue	Silver	34° #-2	19-40 66 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Piston Port
Displacement ..... 488 cc
Bore ..... 2.8346" (72mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0024" - 0.0037"(0.06 - 0.095mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking 5W
Piston Ring Marking 51A
Piston Ring End Gap ..... .008"-.016"(.20-.40mm)
Head cc's (Uninstalled) 28cc
Head cc's (Installed) 23.6cc
Operating RPM±200 ..... 7800 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 4000 RPM
Cylinder Head Torque ..... 8mm 17-20 ft.lbs, 10mm 24-26 ft.lbs
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... CLASSIC TOURING
MODEL NUMBER: . 099ET4BS
ENGINE MODEL: .. EC50PL192

ELECTRICAL

Flywheel I.D. FP5445
CDI Marking CU6417
Alternator Output ... 200 Watts
Ignition Timing ..... 28° BTDC@3000RPM±1.5°
0.173" BTDC (±0.0175")
4.40mm BTDC (±0.48mm)
Operating Timing ... 16° @ 7500 RPM
Spark Plug / Gap ... Champion RN-3C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@9 watts
Brake ..... 2@18 watts
Voltage Regulator .. LR9, LR2
Electric Start ..... Standard
*LR9= Half wave voltage regulator
*LR2=Rectifier only for battery charging

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 9 fl.oz(265cc)

SUSPENSION / CHASSIS

Body Style ..... Evolved
Front Suspension .. XTRA-12
Maximum Width .... 42.50"(107.95cm)
Camber ..... 0"±5/16"(0±8mm)
Toe Out ..... 1/8"-1/4"(3-6.35mm)
Front Shocks ..... Indy Select
IFS Spring Rate .... 100#/in.
Front Spring Preload 0.43" Thread Adjust
Front Vertical Travel 10.0 in.(25.4cm)
Rear Suspension ... XTRA-12
Rear Travel ..... 12.0 in.(30.48cm)
Front Track Shock .. Indy Select
Spring Rate ..... 90/150#/in.
Rear Track Shock .. Indy Select with 275# Spring
Rear Springs ..... .437" / 77°
Track Type ..... 15"x133.5"x.82" (38.1x339.09x2.08cm)
Track Tension ..... 1-1 1/8" (2.54-2.86cm) free hand 16" (40.64cm) ahead of rear idler shaft with no weight

CHAINCASE

Sprockets / Chain .... 19-40, 66 P 3/4 HYVO
Reverse ..... Standard
Brake Pads ..... Type 69
Chaincase Center Dist.6 5/8"(16.83cm)
Driveshaft Sprockets . 2 Drivers
Brake Type ..... Hydraulic Disc

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM	FIRM(STD)
.406" diameter/77°	**.421" diameter/77°**	**.437" diameter/77°**
L.H 7041394-067	L.H. 7041406-067	L.H. 7041487-067
R.H. 7041395-067	R.H 7041407-067	R.H. 7041488-067

MODEL: ..... XLT SPECIAL
MODEL NUMBER: . 099AB6AS
ENGINE MODEL: .. EC58PL160

CARBURETION

Type ..... 3 TM38 Mikuni
Main Jet 360
Pilot Jet 35
Jet Needle 9DH3-54-4
Needle Jet 0-6
Cutaway 3.0
Idle Mixture Screw .... 1.5 Turns
Valve Seat ..... 1.5 Viton
Fuel Octane (R+M/2) . 87 Non-Oxygenated or
89 Oxygenated
Starter Jet 155
Pilot Air Jet 1.0

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	380 #4	360 $4	340 $4	330 $4
	900-1800 (3000-6000)	350 #4	330 $4	320 $4	300 $3
	1800-2700 (6000-9000)	320 $4	300 $4	290 $3	270 $3
	2700-3700 (9000-12000)	290 $4	280 #3	270 $3	250 $3

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250
Center Distance ..... 12" (305mm)
Shift Weights ..... 10M Bushed
Primary Spring ..... Dark Blue
Secondary Spring .... Silver
Driven Helix ..... R-32 #2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10M Bushed	Dark Blue	Silver	R-32 #-2	22-41 68 P 3/4 HYVO
	900-1800 (3000-6000)	10MB Bushed	Dark Blue	Silver	34° #-2	22-41 68 P 3/4 HYVO
	1800-2700 (6000-9000)	10MR Bushed	Dark Blue	Silver	R-32 #-2	21-41 68 P 3/4 HYVO
	2700-3700 (9000-12000)	10MR Bushed	Dark Blue	Silver	R-32 #-2	21-41 68 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Piston Port Triple
Displacement 598cc
Bore ..... 2.5600" (65.025mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0035" - 0.0049"(0.09 - 0.125mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking 58F
Piston Ring Marking 3N
Piston ring end gap ..... .012"-.020"(.30-.50mm)
Head cc's (Uninstalled) 20.5cc
Head cc's (Installed) 17.1cc
Operating RPM±200 ..... 8300 RPM
Idle RPM±200 ..... 1900 RPM
Engagement RPM±300 ..... 4200 RPM
Cylinder Head Torque ..... 8mm 17-20 ft.lbs, 10mm 24-26 ft.lbs
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... XLT SPECIAL
MODEL NUMBER: . 099AB6AS
ENGINE MODEL: .. EC58PL160

ELECTRICAL

Flywheel I.D. FP9102
CDI Marking CU2552
Alternator Output ... 280 Watts
Ignition Timing ..... 28° BTDC@3000RPM±1.5°
0.173" BTDC (±0.0175")
4.40mm BTDC (±0.48mm)
Operating Timing ... 20° @ 7500 RPM
Spark Plug / Gap ... Champion RN-2C / 0.028" (0.7mm)
Lights: Head ..... Halogen 130/110 watts
Tail ..... 2@9 watts
Brake ..... 2@18 watts
Voltage Regulator .. LR7
Electric Start ..... Option
*LR7= Full wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Aggressive
Front Suspension .. XTRA-10, CRC
Maximum Width .... 41.00"(104.14cm)
Camber ..... 3/4"±5/16"(19.05±8mm)
Toe Out ..... 3/8"-1/2"(9.65-12.7mm)
Front Shocks ..... Indy Select
IFS Spring Rate .... 100#/in.
Front Spring Preload 0.13" Thread Adjust
Front Vertical Travel 9.30 in.(23.62cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 8.25 in.(25.4cm)
Front Track Shock .. Ryde FX
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Polaris Position Sensitive Shock
Rear Springs ..... .359"(sq.) / 77°
Track Type ..... 15"x121"x.82" (38.1x307.34x2.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 22-41, 68 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 6 5/8"(16.83cm)
Driveshaft Sprockets . 2 Drivers wide
Brake Type ..... Hydraulic Disc

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

MODEL: ..... XLT CLASSIC
MODEL NUMBER: . 099ED6AS
ENGINE MODEL: .. EC58PL131

CARBURETION

Type ..... VM34SS Mikuni
Main Jet 250
Pilot Jet 40
Jet Needle 6DP17-2
Needle Jet ..... Q-4(480)
Cutaway ..... 2.5 CH
Air Screw ..... 1 Turn
Valve Seat ..... 1.5 Viton
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .210" - (5.53mm)
Idle Sync Gap
Under Cutaway ..... .234" (5.94mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29° to -12°C	+10° to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	250 #2	250 #2	230 #2	210 #2
	900-1800 (3000-6000)	230 #2	220 #2	210 #1	195 #1
	1800-2700 (6000-9000)	210 #2	200 #1	190 #1	180 #1
	2700-3700 (9000-12000)	190 #2	180 #1	175 #1	165 #1

XXX #X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250
Center Distance ..... 12" (305mm)
Shift Weights ..... 10M Bushed
Primary Spring ..... Silver/Gold
Secondary Spring .... Silver
Driven Helix ..... 34° #2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10M Bushed	Silver/Gold	Silver	34° #-2	22-41 68 P 3/4 HYVO
	900-1800 (3000-6000)	10M Blue Bushed	Silver/Gold	Silver	34° #-2	22-41 68 P 3/4 HYVO
	1800-2700 (6000-9000)	10M White Bushed	Dark Blue	Silver	34° #-2	21-41 68 P 3/4 HYVO
	2700-3700 (9000-12000)	10M Red Bushed	Dark Blue	Silver	34° #-2	21-41 68 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Piston Port Triple
Displacement 598cc
Bore ..... 2.5600" (65.025mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0035" - 0.0049"(0.09 - 0.125mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking 58F
Piston Ring Marking 3N
Piston Ring End Gap ..... .012"-.020"(.30-.50mm)
Head cc's (Uninstalled) 19.9cc
Head cc's (Installed) 19.5cc
Operating RPM±200 ..... 8000 RPM
Idle RPM±200 ..... 1900 RPM
Engagement RPM±300 ..... 4000 RPM
Cylinder Head Torque ..... 8mm 17-20 ft.lbs, 10mm 24-26 ft.lbs
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... XLT CLASSIC
MODEL NUMBER: . 099ED6AS
ENGINE MODEL: .. EC58PL131

ELECTRICAL

Flywheel I.D. FP9102
CDI Marking CU2552
Alternator Output ... 280 Watts
Ignition Timing ..... 28° BTDC@3000RPM±1.5°
0.173" BTDC (±0.0175")
4.40mm BTDC (±0.48mm)
Operating Timing ... 20° @ 7500 RPM
Spark Plug / Gap ... Champion RN-3C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@2 watts
Brake ..... 1@17 watts
Voltage Regulator .. LR7, LR2
Electric Start ..... Standard
*LR7= Full wave voltage regulator
*LR2=Rectifier only for battery charging

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 9 fl.oz(265cc)

SUSPENSION / CHASSIS

Body Style ..... Evolved
Front Suspension .. XTRA-12
Maximum Width .... 42.50"(107.95cm)
Camber ..... 0"±5/16"(0±8mm)
Toe Out ..... 1/8-1/4"(3-6.35mm)
Front Shocks ..... Indy Select
IFS Spring Rate .... 75#/in.
Front Spring Preload 0.25" Thread Adjust
Front Vertical Travel 10.0 in.(25.4cm)
Rear Suspension ... XTRA-12
Rear Travel ..... 12.0 in.(30.48cm)
Front Track Shock .. Ryde AFX
Spring Rate ..... 75/125#/in.
Rear Track Shock .. Ryde AFX with 85# Spring
Rear Springs ..... .406" / 55°
Track Type ..... 15"x121"x.82" (38.1x307.34x2.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 22-41, 68 P 3/4 HYVO
Reverse ..... Standard
Brake Pads ..... Type 69
Chaincase Center Dist. 6 5/8"(16.83cm)
Driveshaft Sprockets . 2 Drivers Wide
Brake Type ..... Hydraulic Disc

OPTIONAL REAR SUSPENSION SPRINGS

SOFT(STD)	FIRM
.406" diameter/55°	**.421" diameter/55°**
L.H 7041394-067	L.H. 7041406-067
R.H. 7041395-067	R.H 7041407-067

GENERAL
1999 Model Specifications

MODEL: ..... XLT TOURING
MODEL NUMBER: . 099ET6AS(A)
ENGINE MODEL: .. EC58PL131

CARBURETION

Type ..... VM34SS Mikuni
Main Jet 250
Pilot Jet 40
Jet Needle 6DP17-2
Needle Jet ..... Q-4(480)
Cutaway ..... 2.5 CH
Air Screw ..... 1 Turn
Valve Seat ..... 1.5 Viton
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .210" - (5.53mm)
Idle Sync Gap
Under Cutaway ..... .234" (5.94mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	250 #2	250 #2	230 #2	210 #2
	900-1800 (3000-6000)	230 #2	220 #2	210 #1	195 #1
	1800-2700 (6000-9000)	210 #2	200 #1	190 #1	180 #1
	2700-3700 (9000-12000)	190 #2	180 #1	175 #1	165 #1

XXX #X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250
Center Distance ..... 12" (305mm)
Shift Weights ..... 10M Bushed
Primary Spring ..... Silver/Gold
Secondary Spring .... Silver
Driven Helix ..... 34° #2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10MB Bushed	Silver/Gold	Silver	34° #-2	20-40 66 P 3/4 HYVO
	900-1800 (3000-6000)	10M Blue Bushed	Silver/Gold	Silver	34° #-2	20-40 66 P 3/4 HYVO
	1800-2700 (6000-9000)	10M White Bushed	Dark Blue	Silver	34° #-2	20-40 66 P 3/4 HYVO
	2700-3700 (9000-12000)	10M Red Bushed	Dark Blue	Silver	34° #-2	20-40 66 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Piston Port Triple
Displacement 598cc
Bore ..... 2.5600" (65.025mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... 0.0035" - 0.0049"(0.09 - 0.125mm)
Service Limit ..... 0.0078" (0.20mm)
Piston Marking 58F
Piston Ring Marking 3N
Piston Ring End Gap ..... .012"-.020"(.30-.50mm)
Head cc's (Uninstalled) 19.9cc
Head cc's (Installed) 19.5cc
Operating RPM±200 ..... 8000 RPM
Idle RPM±200 ..... 1900 RPM
Engagement RPM±300 ..... 3800 RPM
Cylinder Head Torque ..... 8mm 17-20 ft.lbs, 10mm 24-26 ft.lbs
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... XLT TOURING
MODEL NUMBER: . 099ET6AS(A)
ENGINE MODEL: .. EC58PL131

ELECTRICAL

Flywheel I.D. FP9102
CDI Marking CU2552
Alternator Output ... 280 Watts
Ignition Timing ..... 28° BTDC@3000RPM±1.5°
0.173" BTDC (±0.0175")
4.40mm BTDC (±0.48mm)
Operating Timing ... 20° @ 7500 RPM
Spark Plug / Gap ... Champion RN-3C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR7, LR2
Electric Start ..... Standard
*LR7= Full wave voltage regulator
*LR2=Rectifier only for battery charging

CAPACITIES

Fuel Tank ..... 11.8 gallons (44.7 liters)
Oil Tank ..... 2 quarts (1.9 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 9 fl.oz(265cc)

SUSPENSION / CHASSIS

Body Style ..... Evolved
Front Suspension .. XTRA-12
Maximum Width .... 42.50"(107.95cm)
Camber ..... 0"±5/16"(0±8mm)
Toe Out ..... 1/8"-1/4"(3-6.35mm)
Front Shocks ..... Indy Select
IFS Spring Rate .... 120#/in.
Front Spring Preload 0.13" Thread Adjust
Front Vertical Travel 10.0 in.(25.4cm)
Rear Suspension ... XTRA-12
Rear Travel ..... 12.0in.(30.48cm)
Front Track Shock .. Ryde AFX
Spring Rate ..... 90/150#/in.
Rear Track Shock .. Indy Select with 275# Spring
Rear Springs ..... .437" / 77°
Track Type ..... 15"x133.5"x.82" (38.1x339.09x2.08cm)
Track Tension ..... 1-1 1/8" (2.54-2.86cm) free hand 16" (40.64cm) ahead of rear idler shaft with no weight

CHAINCASE

Sprockets / Chain .... 20-40, 66 P 3/4 HYVO
Reverse ..... Standard
Brake Pads ..... Type 69
Chaincase Center Dist.6 5/8"(16.83cm)
Driveshaft Sprockets . 4 Drivers
Brake Type ..... Hydraulic Disc

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM	FIRM(STD)
.406" diameter/77°	**.421" diameter/77°**	**.437" diameter/77°**
L.H 7041394-067	L.H. 7041406-067	L.H. 7041487-067
R.H. 7041395-067	R.H 7041407-067	R.H. 7041488-067

MODEL: ..... INDY 500 XC / 500 XC SP
MODEL NUMBER: . 099SB5AS / 099SP5AS
ENGINE MODEL: .. S50-44-99A2

CARBURETION

Type ..... TM38 Mikuni
Main Jet 370
Pilot Jet 45
Jet Needle 9FH4-57-3
Needle Jet P-6
Cutaway 1.5
Air Screw ..... 2 Turns
Valve Seat ..... 1.5 Viton
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Starter Jet 155
Pilot Air Jet 1.0

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	380 #3	370 #3	350 #3	330 #3
	900-1800 (3000-6000)	340 #3	320 #3	300 #3	290 #2
	1800-2700 (6000-9000)	300 #3	290 #3	270 #3	250 #2
	2700-3700 (9000-12000)	270 #3	260 #3	240 #3	220 #2

XXX #X - # refers to the clip position from top of jet needle.

- Production Setting

- Line zone should remove washer from underneath needle and place on top

CLUTCHES

Type P-85
Belt 3211074
Belt Width (Projected) . 1.438" (36.52mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.625
Center Distance ..... 12" (305mm)
Shift Weights 10-56
Primary Spring ..... Dark Blue
Secondary Spring .... Silver
Driven Helix ..... R-32 #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10-56	Dark Blue	Silver	R-32 #-2	22-41 70 P 3/4 HYVO
	900-1800 (3000-6000)	10-54	Almond Gold	Silver	R-32 #-2	22-41-70 P 3/4 HYVO
	1800-2700 (6000-9000)	10AL or 10	Almond Gold	Silver	R-32 #-3	22-41 70 P 3/4 HYVO
	2700-3700 (9000-12000)	10	Almond Gold	Silver	R-32 #-2	22-41 70 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Case Reed
Displacement ..... 500 cc
Bore ..... 2.776" (70.5mm)
Stroke ..... 2.520" (64mm)
Piston / Cylinder Clearance ... 0.0023" - 0.0037"(0.06 -0.095mm)
Service Limit ..... 0.0059" (0.15mm)
Piston Marking ..... 70.38, ELCO 2205
Piston Ring Marking ..... "o" faces upward
Piston Ring End Gap ..... .012"-.018"(.30-.46mm)
Head cc's (Uninstalled) 28.6cc
Head cc's (Installed) 25.4cc
Operating RPM±200 ..... 8000 RPM
Idle RPM±200 ..... 1500 RPM
Engagement RPM±300 ..... 4200 RPM
Cylinder Head Torque ..... 20-24 ft.lbs(2.8-3.3 kgm)
Cylinder Base Nut Torque .... 30-34 ft.lbs(4.15-4.7 kgm)
Crankcase Torque (8mm) .... 20-24 ft.lbs(2.8-3.3 kgm)
Crankcase Torque (10mm) ... N/A
Flywheel Torque ..... 90 ft.lbs(12.4 kgm)

MODEL: ..... INDY 500 XC / 500 XC SP
MODEL NUMBER: . 099SB5AS / 099SP5AS
ENGINE MODEL: .. S50-44-99A2

ELECTRICAL

Flywheel I.D. 4060141
CDI Marking 4060198
Alternator Output ... 280 Watts
Ignition Timing ..... 12° BTDC@3000RPM±1.5°
0.034" BTDC (±0.008")
0.872mm BTDC (±0.208mm)
Operating Timing ... 15° @ 7500 RPM
Spark Plug / Gap ... Champion RN-2C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@8 watts-XC (2@2 watts SP)
Brake ..... 2@8 watts-XC (1@17 wattsSP)
Voltage Regulator .. LR7
Electric Start ..... N/A
*LR7= Full wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gal.(44.7L)/10.5(39.7)
Oil Tank ..... 3 quarts (2.8 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. XC-10, CRC
Maximum Width .... 41.00"(104.14cm)
Camber ..... 1.05"±5/16"(26.67±8mm)
Toe Out ..... 0-1/8"(0-3mm)
Front Shocks ..... Indy Select(XC) / Fox™ IFP(SP)
IFS Spring Rate .... 100#/in.(XC) / 74/120#in.(SP)
Front Spring Preload 0.20" Thread Adjust(XC) / 1.13" Thread Adjust(SP)
Front Vertical Travel 9.0 in.(22.86cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 8.25 in.(21cm)
Front Track Shock .. Ryde FX(XC) / Fox™ IFP(SP)
Spring Rate ..... 200#/in. variable(XC) / 190#/in.(SP)
Rear Track Shock .. Polaris Position Sensitive Shock
Rear Springs ..... .359" (sq.) / 77°
Track Type ..... 15"x121"x.82" (38.1x307.34x2.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 22-41, 70 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 7.05"(17.91cm)
Driveshaft Sprockets . 2 Drivers Wide
Brake Type ..... Polaris HPB

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

MODEL: ..... INDY 600 XC / 600 XC SP
MODEL NUMBER: . 099SB6DS / 099SP6DS
ENGINE MODEL: .. SN60-70-99A2

CARBURETION

Type ..... 2-Keihin PWK 39
Main Jet 185
Pilot Jet ..... #38
Jet Needle R1368G-3
Needle Jet ..... 2.9mm fixed
Cutaway 5.5
Air Screw ..... 1.0 Turn
Valve Seat 1.8
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .028" - (.7mm)
Idle Sync Gap
Under Cutaway ..... .059" - (1.5mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	190 #3	185 #3	178 #3	172 #3
	900-1800 (3000-6000)	178 #3	175 #3	168 #3	162 #3
	1800-2700 (6000-9000)	170 #3	165 #3	158 #2	155 #2
	2700-3700 (9000-12000)	158 #3	155 #2	150 #2	145 #2

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211065
Belt Width (Projected) . 1.438" (36.53mm)
Side Angle (Overall) .. 28°
Outside Circumference 48.375
Center Distance ..... 12.5" (317.5mm)
Shift Weights ..... 10-58 Bushed
Primary Spring ..... Dark Blue
Secondary Spring .... Silver
Driven Helix ..... R-32 #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10-58 Bushed	Dark Blue	Silver	R-32 #-2	22-40 70 P 3/4 HYVO
	900-1800 (3000-6000)	10-56 Bushed	Almond Gold	Silver/ Blue	R-3 #-2	22-40-70 P 3/4 HYVO
	1800-2700 (6000-9000)	10-54 Bushed	Almond Gold	Silver/ Blue	R-3 #-3	21-41 70 P 3/4 HYVO
	2700-3700 (9000-12000)	10AL Bushed	Almond Gold	Silver/ Blue	R-3 #-2	21-41 70 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Case Reed
Displacement ..... 593 cc
Bore ..... 2.9930" (74.5mm)
Stroke ..... 2.6772" (68.0mm)
Piston / Cylinder Clearance ... .0043" - .0059"(.11 -.15mm)
Service Limit ..... .0078" (.2mm)
Piston Marking EK2202
Piston Ring Marking ..... "o" faces upward
Piston Ring End Gap ..... .012"-.018"(.30-.46mm)
Head cc's (Uninstalled) 34.0cc
Head cc's (Installed) 26.0cc
Operating RPM±200 ..... 8000 RPM
Idle RPM±200 ..... 1500 RPM
Engagement RPM±300 ..... 4200 RPM
Cylinder Head Torque ..... 20ft.lbs(2.8kgm)
Cylinder Base Nut Torque .... 35-40 ft.lbs(4.8-5.5 kgm)
Crankcase Torque (8mm) .... N/A
Crankcase Torque (10mm) ... 35-40 ft.lbs(4.8-5.5 kgm)
Flywheel Torque ..... 55 ft.lbs(7.4 kgm)

MODEL: ..... INDY 600 XC / 600 XC SP
MODEL NUMBER: . 099SB6DS / 099SP6DS
ENGINE MODEL: .. SN60-70-99A2

ELECTRICAL

Flywheel I.D. 4010130
CDI Marking 4060209
Alternator Output ... 280 Watts
Ignition Timing ..... 6° BTDC@1750RPM±1.5°
0.009" BTDC (±0.005")
0.22mm BTDC (±0.105mm)
Operating Timing ... 13° @ 7500 RPM
Spark Plug / Gap ... Champion RN-2C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@8 watts-XC (2@2watts SP)
Brake ..... 2@8 watts-XC (1@17 watts SP)
Voltage Regulator .. LR7
Electric Start ..... Optional
*LR7= Full wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gal.(44.7L)/10.5(39.7)
Oil Tank ..... 3 quarts (2.8 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. XC-10, CRC
Maximum Width .... 41.00"(104.14cm)
Camber ..... 1.05"±5/16"(26.67±8mm)
Toe Out ..... 0-1/8"(0-3mm)
Front Shocks ..... Indy Select(XC) / Fox™ IFP(SP)
IFS Spring Rate .... 100#/in.(XC) / 74/120#in.(SP)
Front Spring Preload 0.20" Thread Adjust(XC) / 1.13" Thread Adjust(SP)
Front Vertical Travel 9.0 in.(22.86cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 8.25 in.(21cm)
Front Track Shock .. Ryde FX(XC) / Fox™ IFP(SP)
Spring Rate ..... 200#/in. variable(XC) / 190#/in.(SP)
Rear Track Shock .. Polaris Position Sensitive Shock
Rear Springs ..... .359" (sq.) / 77°
Track Type ..... 15"x121"x.91" (38.1x307.34x2.31cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 22-40, 70 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 7.05"(17.91cm)
Driveshaft Sprockets . 2 Drivers Wide
Brake Type ..... Polaris HPB Liquid Cooled

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

MODEL: ..... INDY 700 XC / 700 XC SP
MODEL NUMBER: . 099SB7AS / 099SP7AS
ENGINE MODEL: .. SN70-70-99A2

CARBURETION

Type ..... 2-Keihin PWK 39
Main Jet ..... PTO 185/MAG 190
Pilot Jet ..... #38
Jet Needle R1368G-3
Needle Jet ..... 2.9mm fixed
Cutaway 5.5
Air Screw ..... 1.0 Turn
Valve Seat 1.8
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .059" - (1.5mm)
Idle Sync Gap
Under Cutaway ..... .063" - (1.6mm)

CLUTCH

Type P-85
Belt 3211065
Belt Width (Projected) . 1.438" (36.53mm)
Side Angle (Overall) .. 28°
Outside Circumference 48.375
Center Distance ..... 12.5" (317.5mm)
Shift Weights ..... 10-60 Bushed
Primary Spring ..... Dark Blue
Secondary Spring .... Silver
Driven Helix ..... 36° Mod #-2

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	MAG195 PTO 190 #3	MAG 190 PTO 185 #3	MAG 182 PTO 178 #3	MAG 178 PTO 172 #3
	900-1800 (3000-6000)	MAG 182 PTO 178 #3	MAG 180 PTO 175 #3	MAG 172 PTO 168 #3	MAG 168 PTO 162 #3
	1800-2700 (6000-9000)	MAG 175 PTO 170 #3	MAG 170 PTO 165 #3	MAG 162 PTO 158 #2	MAG 160 PTO 155 #2
	2700-3700 (9000-12000)	MAG 162 PTO 158 #3	MAG 160 PTO 155 #2	MAG 155 PTO 150 #2	MAG 150 PTO 145 #2

XXX #X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10 60 Bushed	Dark Blue	Silver	36° Mod #-2	24-40 70 P 3/4 HYVO
	900-1800 (3000-6000)	10-58 Bushed	Almond Gold	Silver/ Blue	R-11 #-2	24-40-70 P 3/4 HYVO
	1800-2700 (6000-9000)	10-56 Bushed	Almond Gold	Silver/ Blue	R-11 #-2	23-41 70 P 3/4 HYVO
	2700-3700 (9000-12000)	10-54 Bushed	Almond Gold	Silver/ Blue	R-11 #-2	23-40 70 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Case Reed Twin
Displ ..... 700 cc
Bore ..... 3.1889" (81mm)
Stroke ..... 2.6772" (68mm)
Piston / Cylinder Clearance ... .0043" - .0053"(.11 -.135mm)
Service Limit ..... .0078" (.2mm)
Piston Marking EK2108
Piston Ring Marking ..... "o" faces upward
Piston Ring End Gap ..... .014"-.020"(.36-.51mm)
Head cc's (Uninstalled) 40.2cc
Head cc's (Installed) 32.5cc
Operating RPM±200 ..... 8000 RPM
Idle RPM±200 ..... 1500 RPM
Engagement RPM±300 ..... 4200 RPM
Cylinder Head Torque ..... 20ft.lbs(2.8kgm)
Cylinder Base Nut Torque .... 35-40 ft.lbs(4.8-5.5 kgm)
Crankcase Torque (8mm) .... N / A
Crankcase Torque (10mm) ... 35-40 ft.lbs(4.8-5.5 kgm)
Flywheel Torque ..... 55 ft.lbs(7.4 kgm)

MODEL: ..... INDY 700 XC / 700 XC SP
MODEL NUMBER: . 099SB7AS / 099SP7AS
ENGINE MODEL: .. SN70-70-99A2

ELECTRICAL

Flywheel I.D. 4010139
CDI Marking 4060212
Alternator Output ... 280 Watts
Ignition Timing ..... 6° BTDC@1750RPM±1.5°
0.009" BTDC (±0.005")
0.22mm BTDC (±0.105mm)
Operating Timing ... 17° @ 7500 RPM
Spark Plug / Gap ... Champion RN-2C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@8 watts-XC (2@2 watts SP)
Brake ..... 2@8 watts-XC (1@17 watts SP)
Voltage Regulator .. LR7
Electric Start ..... Optional
*LR7= Full wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gal.(44.7L)/10.5(39.7)
Oil Tank ..... 3 quarts (2.8 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. XC-10, CRC
Maximum Width .... 41.00"(104.14cm)
Camber ..... 1.05"±5/16"(26.67±8mm)
Toe Out ..... 0-1/8"(0-3mm)
Front Shocks ..... Indy Select(XC) / Fox™ IFP(SP)
IFS Spring Rate .... 100#/in.(XC) / 74/120#in.(SP)
Front Spring Preload 0.20" Thread Adjust(XC) / 1.13" Thread Adjust(SP)
Front Vertical Travel 9.0 in.(22.86cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 8.25 in.(21cm)
Front Track Shock .. Ryde FX(XC) / Fox™ IFP(SP)
Spring Rate ..... 200#/in. variable(XC) / 190#/in.(SP)
Rear Track Shock .. Polaris Position Sensitive Shock
Rear Springs ..... .359" (sq.) / 77°
Track Type ..... 15"x121"x.91" (38.1x307.34x2.31cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 24-40, 70 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 7.05(17.91cm)
Driveshaft Sprockets . 2 Drivers Wide
Brake Type ..... Polaris HPB Liquid Cooled

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

GENERAL
1999 Model Specifications

MODEL: ..... INDY 600 RMK
MODEL NUMBER: . 099SR6DS(A)
ENGINE MODEL: .. SN60-70-99A1

CARBURETION

Type ..... 2-Keihin PWK 39 (ACCS)
Main Jet 185
Pilot Jet 50
Jet Needle R1367G-2
Needle Jet ..... 2.9x4.6x1.5mm fixed
Cutaway ..... 6.0 Notched
Air Screw ..... 1.0 Turn
Valve Seat 1.8
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... 0.102" - (2.6mm)
Idle Sync Gap
Under Cutaway ..... 0.118" - (3.0mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	195 #2 Air Screw 2 turns	190 #2 Air Screw 2 turns	185 #2 Air Screw 2 turns	180 #2 Air Screw 2 turns
	900-1800 (3000-6000)	195 #2 Air Screw 1.5 turns	190 #2 Air Screw 1.5 turns	185 #2 Air Screw 1.5 turns	180 #2 Air Screw 1.5 turns
	1800-2700 (6000-9000)	195 #2 Air Screw 1 turn	190 #2 Air Screw 1 turn	185 #2 Air Screw 1 turn	180 #2 Air Screw 1 turn
	2700-3700 (9000-12000)	195 #2 Air Screw 1/2 turn	190 #2 Air Screw 1/2 turn	185 #2 Air Scre 1/2 turn	180 #2 Air Screw 1/2 turn

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211065
Belt Width (Projected) . 1.438" (36.53mm)
Side Angle (Overall) .. 28°
Outside Circumference 48.375
Center Distance ..... 12.5" (317.5mm)
Shift Weights ..... 10-54 Bushed
Primary Spring ..... Dark Blue
Secondary Spring .... Silver/Blue
Driven Helix ..... R-8 #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10-58 Bushed	Dark Blue	Silver/ Blue	R-8 #-2	19-40 68 P 3/4 HYVO
	900-1800 (3000-6000)	10-56 Bushed	Dark Blue	Silver/ Blue	R-8 #-2	19-40-68 P 3/4 HYVO
	1800-2700 (6000-9000)	10-54 Bushed	Dark Blue	Silver/ Blue	R-8 #-2	19-40 68 P 3/4 HYVO
	2700-3700 (9000-12000)	10 Bushed	Dark Blue	Silver/ Blue	R-8 #-2	19-40 68 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Case Reed Twin
Displacement ..... 593 cc
Bore ..... 2.9930" (74.5mm)
Stroke ..... 2.6772" (68mm)
Piston / Cylinder Clearance ... .0043" - .0059"(.11 -.15mm)
Service Limit ..... .0078" (.2mm)
Piston Marking EK2202
Piston Ring Marking ..... "o" faces upward
Piston Ring End Gap ..... .012"-.018"(.30-.46mm)
Head cc's (Uninstalled) 34.0cc
Head cc's (Installed) 26.0cc
Operating RPM±200 ..... 8000 RPM
Idle RPM±200 ..... 1500 RPM
Engagement RPM±300 ..... 4200 RPM
Cylinder Head Torque ..... 20ft.lbs(2.8kgm)
Cylinder Base Nut Torque .... 35-40 ft.lbs(4.8-5.5 kgm)
Crankcase Torque (8mm) .... N/A
Crankcase Torque (10mm) ... 35-40 ft.lbs(4.8-5.5 kgm)
Flywheel Torque ..... 55 ft.lbs(7.4 kgm)

MODEL: ..... INDY 600 RMK
MODEL NUMBER: . 099SR6DS(A)
ENGINE MODEL: .. SN60-70-99A1

ELECTRICAL

Flywheel I.D. 4010139
CDI Marking 4060209
Alternator Output ... 280 Watts
Ignition Timing ..... 6° BTDC@1750RPM±1.5°
0.0086" BTDC (±0.0045")
0.22mm BTDC (±0.105mm)
Operating Timing ... 13° @ 7500 RPM
Spark Plug / Gap ... Champion RN-2C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR7
Electric Start ..... Optional
*LR7= Full wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gal.(44.7L)
Oil Tank ..... 3 quarts (2.8 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. RMK CRC
Maximum Width .... 38.00"(96.52cm)
Camber ..... 11/32"±5/16"(9±8mm)
Toe Out ..... 3/8-1/2"(9.65-12.7mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 100#/in.
Front Spring Preload 0.13" Thread Adjust
Front Vertical Travel 8.05in.(20.54cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 11.5 in.(29.21cm)
Front Track Shock .. Nitrex
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Indy Select
Rear Springs ..... .359" (sq.) / 77°
Track Type ..... 15"x136"x1.75/2.0" (38.1x345.44x4.44/5.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 19-40, 68 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 7.05"(17.91cm)
Driveshaft Sprockets . 2 Drivers Wide
Brake Type ..... Polaris HPB Liquid Cooled

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

GENERAL
1999 Model Specifications

MODEL: ..... INDY 700 RMK
MODEL NUMBER: . 099SR7AS(A)
ENGINE MODEL: .. S70-70-99A3

CARBURETION

Type ..... 2-Keihin PWK 39 (ACCS)
Main Jet 190
Pilot Jet 48
Jet Needle R1368G-2
Needle Jet ..... 2.9x4.6x1.5mm fixed
Cutaway ..... 6.0 Notched
Air Screw ..... 1.0 Turn
Valve Seat 1.8
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... 0.102" - (2.6mm)
Idle Sync Gap
Under Cutaway ..... 0.118" - (3.0mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	200 #2 Air Screw 2 turns	195 #2 Air Screw 2 turns	190 #2 Air Screw 2 turns	185 #2 Air Screw 2 turns
	900-1800 (3000-6000)	200 #2 Air Screw 1.5 turns	195 #2 Air Screw 1.5 turns	190 #2 Air Screw 1.5 turns	185 #2 Air Screw 1.5 turns
	1800-2700 (6000-9000)	200 #2 Air Screw 1 turn	195 #2 Air Screw 1 turn	190 #2 Air Screw 1 turn	185 #2 Air Screw 1 turn
	2700-3700 (9000-12000)	200 #2 Air Screw 1/2 turn	195 #2 Air Screw 1/2 turn	190 #2 Air Scre 1/2 turn	185 #2 Air Screw 1/2 turn

XXX
#X - # refers to the clip position from top of jet needle.

▭ - Production Setting

CLUTCH

Type P-85
Belt 3211065
Belt Width (Projected) . 1.438" (36.53mm)
Side Angle (Overall) .. 28°
Outside Circumference 48.375
Center Distance ..... 12.5" (317.5mm)
Shift Weights ..... 10-58 Bushed
Primary Spring ..... Dark Blue
Secondary Spring .... Silver/Blue
Driven Helix ..... R-11 #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10-60 Bushed	Dark Blue	Silver/ Blue	R-11 #-2	21-41 70 P 3/4 HYVO
	900-1800 (3000-6000)	10-58 Bushed	Dark Blue	Silver/ Blue	R-11 #-2	21-41-70 P 3/4 HYVO
	1800-2700 (6000-9000)	10-58 Bushed	Dark Blue	Silver/ Blue	R-11 #-2	21-41 70 P 3/4 HYVO
	2700-3700 (9000-12000)	10-56 Bushed	Dark Blue	Silver/ Blue	R-11 #-2	21-41 70 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Case Reed Twin
Displacement 700cc
Bore ..... 3.1889" (81mm)
Stroke ..... 2.6772" (68mm)
Piston / Cylinder Clearance .0043" - .0053"(.11 -.135mm)
Service Limit ..... .0078" (.20mm)
Piston Marking EK2108
Piston Ring Marking ..... "o" faces upward
Piston Ring End Gap ..... .014"-.020"(.36-.51mm)
Head cc's (Uninstalled) 40.2cc
Head cc's (Installed) 32.5cc
Operating RPM±200 ..... 8000 RPM
Idle RPM±200 ..... 1500 RPM
Engagement RPM±300 .... 4200 RPM
Cylinder Head Torque ..... 20ft.lbs(2.8kgm)
Cylinder Base Nut Torque .. 35-40 ft.lbs(4.8-5.5 kgm)
Crankcase Torque (8mm) .. N/A
Crankcase Torque (10mm) . 35-40 ft.lbs(4.8-5.5 kgm)
Flywheel Torque ..... 55 ft.lbs(7.4 kgm)

MODEL: ..... INDY 700 RMK
MODEL NUMBER: . 099SR7AS(A)
ENGINE MODEL: .. S70-70-99A3

ELECTRICAL

Flywheel I.D. ..... Ducati 4010139
CDI Marking 4060211
Alternator Output ... 280 Watts
Ignition Timing ..... 12° BTDC@3000RPM±1.5°
0.037" BTDC (±0.004")
0.93mm BTDC (±0.22mm)
Operating Timing ... 16° @ 8250 RPM
Spark Plug / Gap ... Champion RN-2C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR7
Electric Start ..... Optional
*LR7= Full wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gal.(44.7L)
Oil Tank ..... 3 quarts (2.8 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. RMK CRC
Maximum Width .... 38.00"(96.52cm)
Camber ..... 11/32"±5/16"(9±8mm)
Toe Out ..... 3/8"-1/2"(9.65mm-12.7mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 100#/in.
Front Spring Preload 0.13" Thread Adjust
Front Vertical Travel 8.05in.(20.45cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 11.5 in.(29.21cm)
Front Track Shock .. Nitrex
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Indy Select
Rear Springs ..... .359" (sq.) / 77°
Track Type ..... 15"x136"x1.75/2.0" (38.1x345.44x4.44/5.08cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 21-41, 70 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 7.05"(17.91cm)
Driveshaft Sprockets . 2 Drivers Wide
Brake Type ..... Polaris HPB Liquid Cooled

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

GENERAL
1999 Model Specifications

MODEL: ..... INDY 700 SKS
MODEL NUMBER: . 099SS7AS
ENGINE MODEL: .. SN70-70-99A1

CARBURETION

Type ..... 2-Keihin PWK 39
Main Jet ..... PTO 185/MAG 190
Pilot Jet ..... #38
Jet Needle R1368G-3
Needle Jet ..... 2.9mm fixed
Cutaway 5.5
Air Screw ..... 1.0 Turn
Valve Seat 1.8
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .051" - (1.3mm)
Idle Sync Gap
Under Cutaway ..... .063" - (1.6mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	MAG195 PTO 190 #3	MAG 190 PTO 185 #3	MAG 182 PTO 178 #3	MAG 178 PTO 172 #3
	900-1800 (3000-6000)	MAG 182 PTO 178 #3	MAG 180 PTO 175 #3	MAG 172 PTO 168 #3	MAG 168 PTO 162 #3
	1800-2700 (6000-9000)	MAG 175 PTO 170 #3	MAG 170 PTO 165 #3	MAG 162 PTO 158 #2	MAG 160 PTO 155 #2
	2700-3700 (9000-12000)	MAG 162 PTO 158 #3	MAG 160 PTO 155 #2	MAG 155 PTO 150 #2	MAG 150 PTO 145 #2

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211065
Belt Width (Projected) . 1.438" (36.53mm)
Side Angle (Overall) .. 28°
Outside Circumference 48.375
Center Distance ..... 12.5" (317.5mm)
Shift Weights ..... 10-60 Bushed
Primary Spring ..... Dark Blue
Secondary Spring .... Silver/Blue
Driven Helix ..... R-11 #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10 60 Bushed	Dark Blue	Silver/ Blue	R-11 #-2	23-40 70 P 3/4 HYVO
	900-1800 (3000-6000)	10-58 Bushed	Dark Blue	Silver/ Blue	R-11 #-2	23-40-70 P 3/4 HYVO
	1800-2700 (6000-9000)	10-56 Bushed	Dark Blue	Silver/ Blue	R-11 #-2	21-41 70 P 3/4 HYVO
	2700-3700 (9000-12000)	10-54 Bushed	Dark Blue	Silver/ Blue	R-11 #-2	21-41 70 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Case Reed Twin
Displacement ..... 700 cc
Bore ..... 3.1889" (81mm)
Stroke ..... 2.6772" (68mm)
Piston / Cylinder Clearance ... .0043" - .0053"(.11 -.135mm)
Service Limit ..... .0078" (.2mm)
Piston Marking EK2108
Piston Ring Marking ..... "o" faces upward
Piston Ring End Gap ..... .014"-.020"(.36-.51mm)
Head cc's (Uninstalled) 40.2cc
Head cc's (Installed) 32.5cc
Operating RPM±200 ..... 8000 RPM
Idle RPM±200 ..... 1500 RPM
Engagement RPM±300 ..... 4200 RPM
Cylinder Head Torque ..... 20ft.lbs(2.8kgm)
Cylinder Base Nut Torque .... 35-40 ft.lbs(4.8-5.5 kgm)
Crankcase Torque (8mm) .... N/A
Crankcase Torque (10mm) ... 35-40 ft.lbs(4.8-5.5 kgm)
Flywheel Torque ..... 55 ft.lbs(7.4 kgm)

MODEL: ..... INDY 700 SKS
MODEL NUMBER: . 099SS7AS
ENGINE MODEL: .. SN70-70-99A1

ELECTRICAL

Flywheel I.D. 4010139
CDI Marking 4060212
Alternator Output ... 280 Watts
Ignition Timing ..... 6° BTDC@1750RPM±1.5°
0.009" BTDC (±0.005")
0.22mm BTDC (±0.105mm)
Operating Timing ... 17° @ 7500 RPM
Spark Plug / Gap ... Champion RN-2C / 0.028" (0.7mm)
Lights: Head ..... Halogen 75/60 watts
Tail ..... 2@3 watts
Brake ..... 18 watts
Voltage Regulator .. LR7
Electric Start ..... Optional
*LR7= Full wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gal.(44.7L)/10.5(39.7)
Oil Tank ..... 3 quarts (2.8 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Gen II
Front Suspension .. XTRA-10 CRC
Maximum Width .... 41.00"(104.14cm)
Camber ..... 3/4"±5/16"(19.05±8mm)
Toe Out ..... 3/8"-1/2"(9.65-12.7mm)
Front Shocks ..... Nitrex
IFS Spring Rate .... 100#/in.
Front Spring Preload 0.38" Thread Adjust
Front Vertical Travel 9.30 in.(23.62cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 9.5 in.(24.13cm)
Front Track Shock .. Nitrex
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Indy Select
Rear Springs ..... .359" (sq.) / 77°
Track Type ..... 15"x136"x1.25" (38.1x345.44x3.175cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 23-40, 70 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist. 7.05"(17.91cm)
Driveshaft Sprockets . 2 Drivers Wide
Brake Type ..... Polaris HPB Liquid Cooled

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

MODEL: ..... INDY 700 XCR
MODEL NUMBER: . 099AB7BS
ENGINE MODEL: .. EC70PL011

CARBURETION

Type ..... TM38 Mikuni
Main Jet 430
Pilot Jet 50
Jet Needle 9CG1-54-3
Needle Jet ..... P-4(825)
Cutaway 2.0
Idle Mixture Screw .... 1.5 Turn
Valve Seat 1.5
Fuel Octane (R+M/2) . Adjustable with key switch
Starter Jet 145
Pilot Air Jet 1.0

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	460 #3	430 #3	400 #3	380 #3
	900-1800 (3000-6000)	410 #3	390 #3	370 #3	340 #2
	1800-2700 (6000-9000)	370 #3	350 #3	330 #2	310 #2
	2700-3700 (9000-12000)	330 #3	310 #2	300 #2	280 #2

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211075
Belt Width (Projected) . 1.438" (36.52mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.625"
Center Distance ..... 12" (305mm)
Shift Weights ..... 10-58 Bushed
Primary Spring ..... Almond
Secondary Spring .... Silver/Blue
Driven Helix ..... R-12 #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10 58 Bushed	Almond	Silver/ Blue	R-12 #-2	24-40 68 P 3/4 HYVO
	900-1800 (3000-6000)	10-56 Bushed	Almond	Silver/ Blue	R-12 #-2	24-40-68 P 3/4 HYVO
	1800-2700 (6000-9000)	10-56 Bushed	Almond	Silver/ Blue	R-12 #-2	22-40 68 P 3/4 HYVO
	2700-3700 (9000-12000)	10-54 Bushed	Almond	Silver/ Blue	R-12 #-2	22-40 68 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Case Reed Triple with VES
Displacement ..... 700 cc
Bore ..... 2.6614" (67.6mm)
Stroke ..... 2.5591" (65mm)
Piston / Cylinder Clearance ... .0027" - .0041"(.070 -.105mm)
Service Limit ..... .0059" (.15mm)
Piston Marking 70A
Piston Ring Marking 70A
Piston Ring End Gap ..... .012"-.018"(.30-.45mm)
Head cc's (Uninstalled) 25.3cc
Head cc's (Installed) 21.2cc
Operating RPM±200 ..... 8500 RPM
Idle RPM±200 ..... 1500 RPM
Engagement RPM±300 ..... 4000 RPM
Cylinder Head Torque ..... 8mm-17-20 ft.lbs, 10mm-24-26 ft.lbs
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... INDY 700 XCR
MODEL NUMBER: . 099AB7BS
ENGINE MODEL: .. EC70PL011

ELECTRICAL

Flywheel I.D. FP9104
CDI Marking K7A08
Alternator Output ... 280 Watts
Ignition Timing ..... 20° BTDC@1750RPM±1.5°
0.098" BTDC (±0.007")
2.476mm BTDC (±0.018mm)
Operating Timing ... 18° @ 8100 RPM
Spark Plug / Gap ... Champion RN-2C/.028" (.7mm)
Lights: Head ..... Halogen 130/110 watts
Tail ..... 2@9 watts
Brake ..... 2@18 watts
Voltage Regulator .. LR7
Electric Start ..... N/A
*LR7= Full wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gal.(44.7L)/10.5(39.7)
Oil Tank ..... 2.4 quarts (2.3 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Aggressive
Front Suspension .. XTRA-10 CRC
Maximum Width .... 41.00"(104.14cm)
Camber ..... 3/4"±5/16"(19.05±8mm)
Toe Out ..... 3/8"-1/2"(9.65-12.7mm)
Front Shocks ..... Fox™ IFP
IFS Spring Rate .... 120#/in.
Front Spring Preload 1.063" Thread Adjust
Front Vertical Travel 9.30 in.(23.62cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 10.2 in.(25.91cm)
Front Track Shock .. Fox™ IFP
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Fox™ IFP
Rear Springs ..... .359" (sq.) / 77°
Track Type ..... 15"x121"x.91" (38.1x307.34x2.31cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 24-40, 68 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist.6 5/8"(16.83cm)
Driveshaft Sprockets . 4 Drivers
Brake Type ..... Liquid Cooled Hydraulic Disc

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

GENERAL
1999 Model Specifications

MODEL: ..... INDY 800 XCR
MODEL NUMBER: . 099AB8AS
ENGINE MODEL: .. EC79PL011

CARBURETION

Type ..... TM38 Mikuni
Main Jet 450
Pilot Jet 50
Jet Needle 9DH6-54-3
Needle Jet ..... P-4 Fixed
Cutaway 2.0
Idle Mixture Screw .... 1.25 Turn
Valve Seat 1.5
Fuel Octane (R+M/2) . Adjustable with key switch
Starter Jet 145
Pilot Air Jet 1.0

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	480 #3	450 #3	420 #3	400 #3
	900-1800 (3000-6000)	440 #3	410 #3	390 #3	370 #2
	1800-2700 (6000-9000)	380 #3	360 #3	330 #2	310 #2
	2700-3700 (9000-12000)	350 #3	320 #2	300 #2	280 #2

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211075
Belt Width (Projected) . 1.438" (36.52mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.625"
Center Distance ..... 12" (305mm)
Shift Weights ..... 10-60 Bushed
Primary Spring ..... Almond
Secondary Spring .... Silver/Blue
Driven Helix ..... R-12 #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10 60 Bushed	Almond	Silver/ Blue	R-12 #-2	24-39 68 P 3/4 HYVO
	900-1800 (3000-6000)	10-58 Bushed	Almond	Silver/ Blue	R-12 #-2	24-39-68 P 3/4 HYVO
	1800-2700 (6000-9000)	10-58 Bushed	Almond	Silver/ Blue	R-12 #-2	23-41 68 P 3/4 HYVO
	2700-3700 (9000-12000)	10-56 Bushed	Almond	Silver/ Blue	R-12 #-2	23-41 68 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Case Reed Triple with VES
Displacement ..... 794 cc
Bore ..... 2.8346" (72mm)
Stroke ..... 2.5591" (65mm)
Piston / Cylinder Clearance ... .0027" - .0041"(.07 -.105mm)
Service Limit ..... .0078" (.20mm)
Piston Marking 79B
Piston Ring Marking 79B
Piston Ring End Gap ..... .012"-.018"(.30-.45mm)
Head cc's (Uninstalled) 28.7
Head cc's (Installed) 23.9
Operating RPM±200 ..... 8500 RPM
Idle RPM±200 ..... 1500 RPM
Engagement RPM±300 ..... 4000 RPM
Cylinder Head Torque ..... 17-20 ft.lbs
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... INDY 800 XCR
MODEL NUMBER: . 099AB8AS
ENGINE MODEL: .. EC79PL011

ELECTRICAL

Flywheel I.D. FP9103
CDI Marking CU7311
Alternator Output ... 280 Watts
Ignition Timing ..... 26° BTDC@3250RPM±1.5°
0.163" BTDC (±0.008")
4.138mm BTDC (±0.021mm)
Operating Timing ... 15° @ 8300 RPM
Spark Plug / Gap ... Champion RN-2C/.028" (.7mm)
Lights: Head ..... Halogen 130/110 watts
Tail ..... 2@9 watts
Brake ..... 2@18 watts
Voltage Regulator .. LR7
Electric Start ..... N/A
*LR7= Full wave voltage regulator

CAPACITIES

Fuel Tank ..... 11.8 gal.(44.7L)/10.5(39.7)
Oil Tank ..... 2.4 quarts (2.3 liters)
Coolant ..... 3 quarts (2.8 liters)
Chaincase Oil ..... 7 fl.oz(210cc)

SUSPENSION / CHASSIS

Body Style ..... Aggressive
Front Suspension .. XTRA-10 CRC
Maximum Width .... 41.00"(104.14cm)
Camber ..... 3/4"±5/16"(19.05±8mm)
Toe Out ..... 3/8"-1/2"(9.65-12.7mm)
Front Shocks ..... Fox™ IFP
IFS Spring Rate .... 120#/in.
Front Spring Preload 1.063" Thread Adjust
Front Vertical Travel 9.30 in.(23.62cm)
Rear Suspension ... XTRA-10
Rear Travel ..... 10.2 in.(25.91cm)
Front Track Shock .. Fox™ IFP
Spring Rate ..... 200#/in. variable
Rear Track Shock .. Fox™ IFP
Rear Springs ..... .359" (sq.) / 77°
Track Type ..... 15"x121"x.91" (38.1x307.34x2.31cm)
Track Tension ..... 3/8" - 1/2" (9.65-12.7mm) slack with 10# (4.54kg) weight 16" (40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain .... 24-39, 68 P 3/4 HYVO
Reverse ..... Option
Brake Pads ..... Type 69
Chaincase Center Dist.6 5/8"(16.83cm)
Driveshaft Sprockets . 4 Drivers
Brake Type ..... Liquid Cooled Hydraulic Disc

OPTIONAL REAR SUSPENSION SPRINGS

SOFT	MEDIUM(STD)	FIRM
.347"(sq.) diameter/77°	**.359"(sq.) diameter/77°**	**.375"(sq.) diameter/77°**
L.H 7041627-067	L.H. 7041629-067	L.H. 7041631-067
R.H. 7041628-067	R.H 7041630-067	R.H. 7041632-067

MODEL: ..... WIDETRAK LX
MODEL NUMBER: . 099SU4BS
ENGINE MODEL: .. EC50PL202

CARBURETION

Type VM34SS
Main Jet 195
Pilot Jet 35
Jet Needle 6EJ26-2
Needle Jet ..... P–6(166)
Cutaway ..... 3.0 CH
Air Screw ..... 0.5 Turn
Valve Seat 1.5
Fuel Octane (R+M/2) . 87 Non-Oxygenated or 89 Oxygenated
Throttle Gap
Under Cutaway ..... .219" - (5.55mm)
Idle Sync Gap
Under Cutaway ..... .240" - (6.1mm)

JETTING CHART

Altitude		AMBIENT TEMPERATURE			
		Below -20°F Below -29°C	-20° to +10°F -29°to -12°C	+10°to +40°F -12° to +5°C	Above +40°F Above 5°C
Meters (Feet)	0-900 (0-3000)	205 #2	195 #2	185 #2	175 #2
	900-1800 (3000-6000)	190 #2	180 #2	170 #2	170 #1
	1800-2700 (6000-9000)	175 #2	165 #2	155 #1	145 #1
	2700-3700 (9000-12000)	155 #2	150 #1	140 #1	135 #1

XXX
#X - # refers to the clip position from top of jet needle.

- Production Setting

CLUTCH

Type P-85
Belt 3211070
Belt Width (Projected) . 1.375" (34.93mm)
Side Angle (Overall) .. 28°
Outside Circumference 47.250"
Center Distance ..... 12" (305mm)
Shift Weights ..... 10 Bushed
Primary Spring ..... Brown
Secondary Spring .... Silver
Driven Helix ..... 36° #-2

CLUTCH CHART

Altitude		DRIVE		DRIVEN		
		Shift Weight	Clutch Spring	Clutch Spring	Driven Helix	Chaincase Gearing
Meters (Feet)	0-900 (0-3000)	10 Bushed	Brown	Silver	36° #-2	19-41 66 P 3/4 HYVO
	900-1800 (3000-6000)	10 Bushed	Red/White	Silver	36° #-2	19-41-66 P 3/4 HYVO
	1800-2700 (6000-9000)	10M Blue Bushed	Red/White	Silver	36° #-2	19-41 66 P 3/4 HYVO
	2700-3700 (9000-12000)	10M White Bushed	Red/White	Silver	36° #-2	19-41 66 P 3/4 HYVO

ENGINE

Type ..... Liquid Cooled Piston Port Twin
Displacement ..... 488 cc
Bore ..... 2.8346" (72mm)
Stroke ..... 2.3622" (60mm)
Piston / Cylinder Clearance ... .0023" - .0037"(.06 -.095mm)
Service Limit ..... .0078" (.20mm)
Piston Marking 5W
Piston Ring Marking 51A
Piston Ring End Gap ..... .008"-.016"(.20-.40mm)
Head cc's (Uninstalled) 28.8cc
Head cc's (Installed) 23.6cc
Operating RPM±200 ..... 7000 RPM
Idle RPM±200 ..... 1600 RPM
Engagement RPM±300 ..... 3800 RPM
Cylinder Head Torque ..... 8mm-17-20 ft.lbs, 10mm-24-26 ft.lbs
Cylinder Base Nut Torque .... 24-28 ft.lbs(3.3-3.9 kgm)
Crankcase Torque (8mm) .... 17-18 ft.lbs(2.2-2.3 kgm)
Crankcase Torque (10mm) ... 23-25 ft.lbs(3.2-3.5 kgm)
Flywheel Torque ..... 60-65 ft.lbs(8.3-9 kgm)

MODEL: ..... WIDETRAK LX
MODEL NUMBER: . 099SU4BS
ENGINE MODEL: .. EC50PL202

ELECTRICAL

Flywheel I.D.	FP5445
CDI Marking	CU6417
Alternator Output ...	200 Watts
Ignition Timing	28° BTDC@3000RPM±1.5°
	0.173" BTDC (±0.0175")
	4.40mm BTDC (±0.48mm)
Operating Timing ...	16° @ 7500 RPM
Spark Plug / Gap ...	Champion RN-3C/.028" (.7mm)
Lights: Head	Halogen 75/60 watts
Tail	8 watts
Brake	29 watts
Voltage Regulator ..	LR9, LR2
Electric Start	Standard

*LR9= Half wave voltage regulator
*LR2= Rectifier only for battery charging

CAPACITIES

Fuel Tank	11.8 gal.(44.7L)/10.5(39.7)
Oil Tank	2.4 quarts (2.3 liters)
Coolant	3 quarts (2.8 liters)
Chaincase Oil	20 fl.oz(590cc)

SUSPENSION / CHASSIS

Body Style	Gen II
Front Suspension ..	38 IFS
Maximum Width	38.00"(96.52cm)
Camber	25/32"±5/16"(20±8mm)
Toe Out	0-1/8"(0-3mm)
Front Shocks	Nitrex
IFS Spring Rate	105#/in.
Front Spring Preload	3 Shims
Front Vertical Travel	7.25 in.(18.42cm)
Rear Suspension ...	Slide Rail
Rear Travel	9 in.(22.86cm)
Front Track Shock ..	Nitrex
Spring Rate	181#/in.
Rear Track Shock ..	Nitrex
Rear Springs	.468" (sq.) / 74°
Track Type	20"x156"x1.0" (50.8x396.24x2.54cm)
Track Tension	3/4" - 1" (1.90-2.54cm) slack with 10# (4.54kg)weight 16" 40.64cm) ahead of rear idler shaft

CHAINCASE

Sprockets / Chain	19-41, 66 P 3/4 HYVO
Reverse	Standard Hi/Low
Brake Pads	Type 69 Widetrak
Chaincase Center Dist.	N/A
Driveshaft Sprockets .	4 Drivers Widetrak
Brake Type	Mechanical Disc